A COMPARISON OF AN INTERDISCIPLINARY CONNECTED TEACHING MODEL INVOLVING LITERACY AND PHYSICAL ACTIVITY FOR 3RD AND 4TH GRADERS AT TWO ELEMENTARY SCHOOLS ON THEIR MOTOR SKILLS, FITNESS LEVELS AND LITERACY SKILLS IN AN AFTER-SCHOOL PROGRAM.

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By

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DEDICATION

To Uncle for instilling the
confidence in me that I can accomplish
anything I put my heart and soul into.
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Abstract

The purpose of this study was to compare an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders at two elementary schools on their motor skills, fitness levels and literacy skills during an after school program. Thirty-two 3rd and 4th graders with and without disabilities from two elementary schools served as participants and were provided a modified version of the Sports, Play, Active, Recreation for Kids (SPARK) program augmented with literacy strategies for 30-one hour sessions. A Static Group Comparison pre-experimental design was used to compare skills and scores from two elementary schools with a combined total of 32 participants. Three site instructors were trained on the protocol prior to implementation for which a 90% criterion score was obtained. A 90% procedural integrity was also noted for this study. Data were descriptively and inferentially analyzed using percentages and Analysis of Variance test. Percentage scores across sites reported no observable differences on the FITNESSGRAM. Moreover, results for the TGMD-2 object control skills and literacy scores yielded no significant differences; however significance was obtained on locomotor skills. Selection and mortality were found to be confounding in this study. Furthermore, the empirical validation of the interdisciplinary connected teaching model was not made with this study.
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CHAPTER I

INTRODUCTION

Over the past decade there has been little to no change in literacy rates among 4th graders in the United States of America despite many national reading programs. Nearly 70 percent of inner city fourth graders are unable to read at a basic level on national reading tests (http://www.whitehouse.gov/news/reports/no-child-left-behind.html 4/5/2004). Yet, in the re-authorization of Public Law 107-110 No Child Left Behind (2001) States, school districts, and even schools are held accountable for ensuring that all students, including disadvantaged students, meet high academic standards. The purpose of Public Law 107-110, No Child Left Behind Act (2001) “was to provide, in a timely manner, a fair and accurate measurement of student academic achievement and reporting trends in such achievement in reading, mathematics, and other subject matter as specified in this section” (http://www.nagb.org/about/plaw.html 4/5/2004). No Child Left Behind Legislation states that “the Administration is committed to ensuring that every child can read by the third grade” (http://www.whitehouse.gov/news/reports/no-child-left-behind.html 4/5/2004). United States Department of Education reports 68 percent of the 4th graders that cannot read well are minority children and those who live in poverty (www.nclb.gov 10/17/2004) According to No Child Left behind Act (2001) schools that do not make progress must provide supplemental services, such as free tutoring or after-school assistance.

Reading scores in Hawaii public schools are below-average when compared to the norm. Schools are continuing to address the need for improved reading with multiple strategies and programs, tutoring and increased academic time per day. Despite the myriad of reading programs (e.g., Title I, SUCCESS COMPACT, Remedial) and strategies (e.g., phonetic
awareness, direct instruction, and whole language), reading achievement scores are still significantly low in Hawaii. Hawaii’s average score for 4th graders on the National Assessment of Education Progress (NAEP) for reading in 2003 was 208, which was lower than that of the nation’s public schools average of 216. Forty-seven percent of Hawaii’s 4th graders are below basic achievement levels on NAEP the reading assessment. Literacy cannot be overlooked given the importance for all school-aged pupils. The federal government and schools have made this a priority with regard to performance outcomes. In addition to improving literacy across all schools, physical in-activity and childhood obesity continues to plague schools. The priority level for physical activity has not received the required support from all aspects of education. Efforts from the American Alliance for Health, Physical Education, Recreation and Dance, Center for Disease Control (CDC) and Departments of Health have insisted that professional organization and groups carefully examine physical in-activity and obesity in schools.

**Physical Inactivity**

According to A Report to the President from the Secretary of Health and Human Services and the Secretary of Education 2000 “Physical inactivity has contributed to an unprecedented epidemic of childhood obesity that is currently plaguing the United States”. “Among children and teens ages six to 19, almost nine million are overweight according to the 1999-2000 data, or triple what the portion was in 1980” (United States Department of Health & Human Services, 2002). Healthy People 2010 (2001) “Type two diabetes, once called “adult onset” diabetes, high blood pressure, once thought to be age related, are now diagnosed in children and teens” (http://fitness.gov/physical_activity_fact_sheet.html 4/5/2004). Healthy People 2010 (2001) stated that “school-based interventions have been
shown to be successful in increasing physical activity levels”

Physical education is a unique area for interdisciplinary learning. More specifically, movement can be used as a medium through which students are provided with opportunities to practice and strengthen language and reading skills in physical education-type activities (Griffin & Morgan, 1998). Cone, Werner, Cone, and Woods (1998) state “Interdisciplinary learning is an educational process in which two or more subject areas are integrated with the goal of fostering enhanced learning in each subject area.” Three benefits have been suggested to exist with regard to an interdisciplinary curriculum: (1) it can help enhance and enrich student learning; (2) an understanding of other subject areas can be built; and (3) an appreciation for the knowledge and expertise brought by other teachers can be fostered (Cone & Cone, 1998). Cone et al., (1998) suggested guidelines for an interdisciplinary learning experience: (1) review curricular guides and scope and sequence; (2) select content (themes, topics, issues); (3) gather information; (4) decide on the interdisciplinary teaching model (connected model); (5) create lesson plans, include specific activities; (6) determine scheduling, materials, equipment, organization, facilities; and (7) decide how to assess student learning.

**Conceptual Framework**

The conceptual framework for this study was centered on the *Connected Interdisciplinary Teaching Model* (Cone, Werner, Cone & Woods, 1998). “The connected interdisciplinary model is defined as skills, topics and concepts of physical education curricula are the primary focus of the learning experience, and the content from another subject area (i.e., language arts) is used to enhance, extend or complement the learning
experience” (Cone et al., 1998, p. 12). This model is characterized by its flexibility, comfort level, scheduling and ease of individual planning with teachers. More specifically, ease of individual planning allows teachers to plan for their lessons independently in order to promote concepts and terminology from another content area. This model is simple for teachers to use and can be accomplished with one person teaching two-academic areas. This ease of administration and flexibility was deemed appropriate for elementary physical education teachers since the reinforcement of content areas from other disciplines is important for children.

The connected model can be used in three ways: “(1) when introducing a new skill, topic or concept, the teacher can use the content from another subject area to further explain or illustrate the skill, topic or concept he/she is teaching; (2) teachers can stimulate thinking and interest in a lesson and demonstrate how the content they are teaching is relevant to the student; and (3) the content of a physical education lesson can be used to supplement or reinforce skills, topics and concepts used in other subject area” (Cone et al., 1998, p. 12).

![Figure 1: The Interdisciplinary Connected Teaching Model.](image-url)
Within the scope of this study, the connected interdisciplinary teaching model was used with an after school program of physical education and literacy. A physical education curriculum served as the catalyst for the study with literacy components (i.e., spelling, sight word vocabulary and student journal writings) interwoven into all physical education lessons. Since physical education was the primary content area and literacy as the secondary content area, the connected interdisciplinary teaching model closely aligned with this study. A modified Sports, Play, and Active Recreation for Kids (SPARK) physical education curriculum was used during the after school program along with supplemental literacy skills and concepts.

Purpose of the study

The purpose of this study was to compare an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders at two elementary schools on their motor skills, fitness levels and literacy skills during an after-school program.

Research Statements

The following research statements were addressed:

1. To describe the health-related fitness levels for 3rd and 4th graders at two elementary schools who are provided with an after-school interdisciplinary connected teaching model of literacy and physical activity as measured by the Prudential FITNESSGRAM.

2. There will be no difference in locomotor performance and object control skills for 3rd and 4th graders from two elementary schools who provided with an after-school interdisciplinary connected teaching model of literacy and physical activity as measured by the Test of Gross Motor Development 2 (TGMD-2).
3. There will be no difference in literacy via student journals for 3rd and 4th graders from two elementary schools who are provided with an after-school interdisciplinary connected teaching model of literacy and physical activity.

Limitations

The limitations of this study were: the structure of after-school program, the number of participants who participated in the study; the participants’ ethnic and cultural backgrounds; the amount of time spent in Literacy Enriched-Physical Education (LE-PE) due to other obligations by the participants (e.g. absent, injured or other school activities); participants’ motivation to participate in the study’s activities; the participants’ behavior during the study; the instructors’ educational background; the instructors’ ethnic and cultural backgrounds and previous experiences in teaching.

Delimitations

The delimitations of this study included: (1) the use of only two schools in the Honolulu district that offer an A+ after-school program; (2) the SPARK curricula that was chosen for use in this study; and (3) the LE-PE lessons that were created for use in this study.

Operational Definitions

1. A+ after-school program - The After-School Plus (A+) Program is a statewide after school program for students in Grades K to 6 whose parents work, attend school or are in a job training program during the hours of A+ operation. The main purpose of the program, instituted in February of 1990, is to reduce the number of latchkey children after school.

2. **FITNESSGRAM** - FITNESSGRAM was developed in 1982 by The Cooper Institute in Dallas, Texas (Cooper Institute, 1999). The objective was to increase parental awareness of children's fitness levels by developing an easy way for physical education teachers to report the results of physical fitness assessments. FITNESSGRAM is a health related physical fitness assessment. Each of the test items was selected to assess important aspects of a student's health related fitness, not skill or agility. Students are compared not to each other, but to health fitness standards, carefully established for each age and gender. The FITNESSGRAM assessment includes items in the following areas of health-related fitness.

**Aerobic Capacity (select one)**
- The Pacer - a 20 meter progressive, multi-stage shuttle run set to music
- One Mile Walk/Run
- Walk Test - available for secondary students

**Body Composition (select one)**
- Percent Body Fat - calculated from triceps and calf skinfold measurements
- Body Mass Index - calculated from height and weight

**Muscle Strength, Endurance, and Flexibility**
- Abdominal Strength Curl-up Test
- Trunk Extensor Strength and Flexibility – Trunk Lift
- Flexibility (select one) Back-saver Sit-and-reach or Shoulder Stretch
- Upper Body Strength and Endurance (select one) Push-up, Modified Pull-up, Pull-up and Flexed Arm Hang

3. **Language Arts** - The subjects, including reading, spelling, and composition, aimed at developing reading and writing skills, usually taught in elementary and secondary school. (Dictionary.com, 2004)

4. **Literacy** - the ability to read and write (dictionary.com, 2004)


7. **No Child Left Behind Act of 2001** (Public Law 107-110)- Title I of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.) is amended to read as follows:

**TITLE I--IMPROVING THE ACADEMIC ACHIEVEMENT OF THE DISADVANTAGED;** The purpose of this title is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments. This purpose can be accomplished by —

(1) ensuring that high-quality academic assessments, accountability systems, teacher preparation and training, curriculum, and instructional materials are aligned with challenging State academic standards so that students, teachers, parents, and administrators can measure progress against common expectations for student academic achievement;
(2) meeting the educational needs of low-achieving children in our Nation's highest-poverty schools, limited English proficient children, migratory children, children with disabilities, Indian children, neglected or delinquent children, and young children in need of reading assistance;
(3) closing the achievement gap between high- and low-performing children, especially the achievement gaps between minority and nonminority students, and between disadvantaged children and their more advantaged peers;
(4) holding schools, local educational agencies, and States accountable for improving the academic achievement of all students, and identifying and turning around low-performing schools that have failed to provide a high-quality education to their students, while providing alternatives to students in such schools to enable the students to receive a high-quality education;
(5) distributing and targeting resources sufficiently to make a difference to local educational agencies and schools where needs are greatest;
(6) improving and strengthening accountability, teaching, and learning by using State assessment systems designed to ensure that students are meeting challenging State
academic achievement and content standards and increasing achievement overall, but especially for the disadvantaged;
(7) providing greater decision making authority and flexibility to schools and teachers in exchange for greater responsibility for student performance;
(8) providing children an enriched and accelerated educational program, including the use of school wide programs or additional services that increase the amount and quality of instructional time;
(9) promoting school wide reform and ensuring the access of children to effective, scientifically based instructional strategies and challenging academic content;
(10) significantly elevating the quality of instruction by providing staff in participating schools with substantial opportunities for professional development;
(11) coordinating services under all parts of this title with each other, with other educational services, and, to the extent feasible, with other agencies providing services to youth, children, and families; and
(12) affording parents substantial and meaningful opportunities to participate in the education of their children. (www.ed.gov/legislation/ESEA02 Oct 17, 2004)

9. Physical Education (Auxter, Pyfer & Huettig, 2005) - Content focused on the development of health-related physical fitness; fundamental motor skills and patterns, skills in aquatics, dance, individual and group games, and sports (including intramural, outside-of-school, and lifetime recreational sports).

10. Static Group Comparison Design (Campbell & Stanley, 1969) – A pre-experimental design whereby groups are not random, but a treatment is provided and a comparison is made to another group.

11. Sports, Play, and Active Recreation for Kids (SPARK) (McKenzie & Rosengard, 1993). Physical Education Curriculum is designed to encourage maximum participation during class time to improve students’ fitness, skills, and enjoyment for third through sixth grade pupils. SPARK emphasizes health-related fitness activities including the attainment of motor skills, knowledge, and social values.

12. Test of Gross Motor Development-2 (TGMD-2) (Ulrich, 2000) - The TGMD-2, a major revision of the Test of Gross Motor Development, is a norm-referenced measure of
common gross motor skills that can be used by kinesiologists, general and special educators, psychologists, and physical therapists. The TGMD2 assists you in identifying children ages 3-0 through 10-11 who are significantly behind their peers in gross motor skill development and who should be eligible for special education services in physical education. The TGMD2 is made up of 12 skills (six for each subtest): *Locomotor*: run, gallop, hop, leap, horizontal jump, and slide. *Object Control*: striking a stationary ball, stationary dribble, kick, catch, overhand throw, and underhand roll.
CHAPTER II

REVIEW OF LITERATURE

This chapter highlights the major sources and components of literature associated with this study. These components include: literacy-related information, physical activity, A+ after school program for latchkey elementary-aged children and the interdisciplinary connected teaching model.

Literacy in United States

Literacy rates have fallen consistently for years in the United States. Mears (2003) suggested that 2.3 million American children become illiterate adults. This dilemma has prompted the federal government to take a serious examination of the overall literacy competencies (i.e., reading achievement) for all school-aged pupils. The jurisdiction under the federal government with regard to literacy will be used throughout this study. For instance, President Bush's commitment to ensuring that every child in America can read by the end of the 3rd grade is strengthened by the passing of the No Child Left Behind (NCLB) Act of 2001. “Progress in reading showed that only 32 percent of the nation’s fourth-graders performed at or above the proficient achievement level, thus demonstrating solid academic performance” (http://www.ed.gov/print/nclb/methods/reading/reading.html 6/9/2004). In fact, school districts have been held accountable for student achievement progress as it relates to reading. While it is beyond the scope of this study to evaluate school districts' on student achievement, it is known that pupils can seek to re-locate to another school district (e.g., higher achievement scores) from a school that is considered low achieving. As such, overall progress reports have indicated that schools are slow to progress to the minimum standard set by the federal government. Given the plethora of information available on the
literacy achievement scores of pupils, and the significant overall low scores on reading, interventions and augmentation strategies are needed to increase achievement scores related to reading.

The basis for reading is a fundamental prerequisite for becoming a productive adult within a global society (Mears, 2003). However, many scholars have defined reading in the form of literacy. Literacy has often been used interchangeably with reading; yet they are completely different. Interestingly, others have used literacy as reading, writing, and spelling. While there might be a myriad of descriptions highlighting literacy, there are no universal definitions and standards of literacy. Literacy rates are based on the most common definition of the ability to read, speak, compute, and write. The general terminology for literacy encompasses multiple strategies. Hence, the connotation for literacy is defined by the “ability to read and write” (Carver & Cunningham, 2000; dictionary.com, 4/172004). Carver and Cunningham (2000) asserted that literacy should share three commonalities: “(a) the ability to engage in some of the unique aspects of reading and writing, (b) contextualization to some extent within the broad demands of the society and (c) some minimal level of practical proficiency” (p. 64).

Another form of literacy is content literary. “Content literacy was defined as one’s ability to use reading and writing for the acquisition of new content” (Buell & Whittaker, 2001, p. 32). “While general literacy skill is the ability to make meaning through reading writing, visual aids, and reasoning, content literacy in physical education means that students can use general literacy skills to acquire knowledge in a specific movement, sport, or fitness context” (Buell & Whittaker, 2001, p. 32). To this, successful performance in physical education requires students to critically think (Buell & Whittaker, 2001). Reading and
writing provides students with ways to connect their class activities with other aspects of their lives and take to an active role in learning and even maximize the potential for content acquisition (Buell & Whittaker, 2001).

Carver and Cunningham (2000) defined literacy as becoming more standardized with the rate of reading and accuracy of spelling being apart of the standard. While literacy may have multiple meanings, within the context of this study, the term content literacy was used to describe the literacy-rich components (sight words and student journal writing) augmented into a physical education curriculum. Content acquisition can take many forms. Components such as spelling, sight words, and journal writing form the basis for becoming an efficient literate person. Particularly in physical education, journal writing is an effect way to bring writing and reflection into physical education (Buell & Whittaker, 2001). More specifically, Buell and Whittaker (2001) asserted that the use of task cards requires students to read, makes decisions, and takes responsibility for their own learning. Given this information, the study sought to examine specific components that could be augmented into a physical education lesson. Namely through the use of student journal writing, the following components were examined: spelling, sentence structure and sight word vocabulary.

Student journals. Student journals are simple, yet effective means to further linguistic development (Cobine, 1995). Journals are written records of experiences; may be general in nature or include specific experiences with a certain subject. Elbow (1997) described the benefits of journal writing to include, helping students stay involved in the course, assisting on commenting, allowing students to be active learners, supporting students to be more adventurous and questioning, understanding how our students are learning, and
facilitating students to write with full attention to their thinking. In order to better ascertain the components of literacy as a whole, student journals served as the primary mode of data collection. Within this, spelling, sight word vocabulary and sentence structure (e.g., subject/verb agreement) was measured via a coded scoring system.

*Spelling.* Spelling is not an easy task. In fact, "spelling is more difficult than reading; it develops more slowly, and difficulties in spelling are usually regarded as less serious than difficulties in reading" (Hulme & Joshi, 1998, p. 369). "Accurate spelling is an important component in the development of writing skills" (Writz, Gardener, Weber, & Bullara, 1996, p. 48). The authors asserted that 3rd graders are able to use self correction for improving spelling, While self correction was beyond the scope of this study, the notion that spelling was an important to the overall literacy development of children was noted. Being able to spell correctly enhances a person’s ability to read and write logically and with precision. Yet, it is clear that the overall concept of literacy involves multiple components. In order to become a literate person, one must ensure that all components are working harmoniously and synergistically with one another. For instance, "the concept of a “communications triangle” of reading, writing, and discussing implies the need for a methodology whereby the teacher could stimulate the natural interaction of language uses in students to further linguistic development" (Cobine, 1995, p. 1) (http://www.ericfacility.net/databases/ERIC_Digests/ed378587.html 6/14/2004). This provides ample evidence that multiple strategies are needed to become literate. Despite the overwhelming support for multiple strategies with respect to literacy that are interwoven, specific strategic components can also be viewed beneficial within a research context. These components can also form the basis for developing a foundation for becoming literate.
Sight word vocabulary. Sight word vocabulary was defined as the “efficient and automatic word recognition essential to comprehension, the construction of meaning, and ultimately, the motivation to engage in reading” (Cahrd & Osborn, 1999, p. 271). Sight word was defined as a word that is immediately recognized as a whole and does not require analysis for identification (wileams.state.wi.us/apps/default.asp?ap=2&Mode=OneWordList&Word=161 6/14/2004). Sight word vocabulary consisted of words that students can identify immediately without decoding. This was an important component of literacy since children with a strong sight vocabulary can read more fluently and comprehend text more effectively. Children typically use vocabulary that encompassed his/her own experiences. Vocabulary such as family, friends, and animals are common language for children at an early age. Children then progressed to higher frequency words; words that children encountered in texts frequently are the focus of literacy instruction. Children developed sight vocabulary through daily opportunities to read, repeated readings of texts, and activities using word walls (www.learner.org/channel/workshops/readingk2/front/keyterms3.html 6/14/2004). Instead of word walls (physical activity words placed on bulletin boards or hung on the walls), sight words (via task cards) were used to demonstrate and explain concepts related to the SPARK curriculum since after school programs do not have access to classrooms at these sites. Sight words are words that immediately recognized as a whole and do not require analysis for identification (wilearns.state.wi.us/apps/default.asp?ap=2&Mode=OneWordList&Word=161 6/14/2004). Further support for vocabulary building strategies can be found with other forms of movement such as drama (Foil & Alber, 2002). The authors reported that drama can
incorporate multiple words from a multisensory approach. The visual, kinesthetic and tactile approaches are very similar to those activities long supported by physical education.

*Sentence structure.* Another component used for measuring literacy involved sentence structures. Sentence structures within this context were defined as children demonstrating subject + verb + agreement in their writing (Owens, 1996). When children wrote in their journals, sentence structures were evaluated on only the aforementioned criteria.

**Literacy in Hawaii's Public Schools**

Marginal to low reading scores in Hawaii public schools have stirred a debate within the community to the extent that something needs to be done to increase reading achievement for elementary-aged children. The majority of public elementary schools utilize a formal reading program for their pupils. Reading programs such as Success Compact, Whole language, Open Court, and On the Mark have been promoted in elementary schools for years. These types of programs, whether successful or not, continue to be used by many elementary teachers. Elementary teachers continue to pursue other avenues for increased success in reading. In fact, one teacher mentioned she would use whatever works to have her children improve their reading scores. She further elaborated that NCLB has increased the “stress levels” for teachers, administrators and staff. This was further evident by elementary schools electing to hire reading specialists. To be specific, Hawaii public elementary schools can opt to hire Instructional Resource Augmentation (IRA) teachers for added instructional support. Several schools, in the past, have hired physical education IRAs to provide quality physical education programs. However, due to the increased pressure to improve reading scores, many schools have elected to hire reading personnel as IRAs. At this point, it is not conclusive on the impact of these specialists in elementary schools.
Though schools are improving, improving reading scores have remained an area of high priority.

"Hawaii’s public school students as a whole scored below the national norm in reading at all grade levels of the Stanford Achievement Test" (Keesing, 1999, p. 1). Shapiro (2004) stated that 58% of 3rd graders failed to meet the state standard for reading last spring. Recent information from the state of Hawaii, Department of Education implied that reading specialists are needed in schools. They surmised that providing more time for reading related activities, will possibly increase student achievement relative to reading scores and comprehension. For instance, each Hawaii public school has adopted a reading methodology for all its students (i.e., direct instruction, whole language, Harcourt, Houfton, Millin). Despite every effort to increase reading achievement scores, many schools in Hawaii still lag behind on reading achievement as indicated by scores related to NCLB. Perhaps there are multiple explanations for this continued lag. Motivational factors and family influences are plausible explanations for which reading achievement can be improved. Acknowledgement was given in that motivation and family interactions can potentially increase reading achievement for children, however, these factors were not considered within the scope of this study.

**Physical Inactivity of United States’ children**

Being alert, attentive and focused can lead to being a good student. The process to which alertness, attentiveness and being focused are all part of research conducted by Sallis, McKenzie, Kolody, Lewis, Marshall and Rosengard, (1999) who posited that these characteristics can be developed in a quality physical education program. Similarly, the benefits of physical activity and the aforementioned characteristics may in fact positively
influence children as they become older. To this, “research links inactivity among children to sedentary living among adults” (National Standards for Physical Education, 2004, p. 3).

The need for more physical activity is further supported by National Association for Sport and Physical Education (NASPE) national standards for physical education (2004) which are as follows: (1) Participates regularly in physical activity; (2) Achieves and maintains a health-enhancing level of physical fitness; (3) Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities; (4) Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activity; (5) Exhibits responsible personal and social behavior that respects self and others in physical activity settings and (6) Values physical activity for health, enjoyment, challenge, self-expressions and/or social interaction. More specifically, The President’s Council on Physical Fitness and Sport (2004) and USDHHS (2004) reported the following information on physical inactivity and health-related issues.

The number of overweight children and teens has doubled in the past two decades; 13 percent of children ages 6 to 11 and 14 percent of adolescents’ ages 12 to 19 were overweight in 1999.

- Only about one-half of young people in the United States ages 12-21 regularly participate in vigorous physical activity. One-fourth is completely inactive.
- Only 17 percent of middle and junior high schools and 2 percent of senior high schools require daily physical activities for all students.
- Physical activity among children and adolescents is important because of the related health, cognitive and emotional benefits.
The topic of health-related fitness has received considerable attention (Ignacio & Mahon, 1995). The authors surmised that significant improvements in cardiovascular endurance in low fit children were obtained when participating in a health-related fitness program. There are without doubt important benefits associated with increased fitness programs such as, children’s ability to be more physically active, demonstrating healthier lifestyles and an overall better appreciation of health and fitness. Since without the elements of being physically active there are indications of overweight children who exhibit coronary heart disease, high blood pressure and diabetes (Sallis & McKenzie, 1991). In this study, Sallis and McKenzie reported that a two-year supervised program improved their cardiovascular and abdominal strength and endurance. Given this information, it appears imperative that along with physical education (albeit motor skills development), a sound, supervised health-related fitness program also needs to be implemented for optimal overall health improvement.

Demonstrating appropriate motor skills and being to move with competence is the first major standard as articulated by NASPE. Specifically, the Standards-based movement is being supported by multiple school districts (Silverman & Ennis, 2003). In fact, most states use standards to evaluate their programs, teacher accountability and student learning. Moreover, while states continue to revise their physical education standards, most adopt NASPE’s version for National Standards. In connection with motor skills, Standard Three implies that learners (students) demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities (NASPE, 2004). The rationale for this standard is to develop physical skills for enjoyment. NASPE further asserts that “mastering movement fundamentals establishes a foundation to facilitate continued motor
skill acquisition and gives students the capacity for successful and advanced levels of performance to further the likelihood of participation on a daily basis” (p. 15). The importance of demonstrating such fundamental motor patterns cannot be overlooked. More importantly for 3rd and 4th graders, the expectations are that they demonstrate maturity and versatility in motor skills for more enjoyable experiences. Having stated such a fact, it was necessary to examine if in fact, targeted students in this study were able to demonstrate these skills at a mastery level. Interestingly, the locomotor patterns and object control skills highlighted in the NASPE standard are similar to those skills used in the Test of Gross Motor Development-2 (Ulrich, 2000). The complexity of demonstrating locomotor and object control skills is critical to the overall motor development of children.

Physical Inactivity of Hawaii’s children.

Hawaii’s children are ranked the nations heaviest. Information garnered from (www.lapietra.edu/hitechquestjr/emily/hawaii.html 6/14/2004) suggested that Hawaii’s adolescent obesity rate has doubled over the past two decades, 22% of boys and girls in Hawaii are overweight, and obese children have a 70%-80% chance of becoming overweight adults. This information is further supported by Chai, et al. (2003) who reported similar results across anthropometric measurements of children of Hawaiian ancestry. The authors posited that body mass index (BMI) were significantly higher for Hawaiian children when compared to the National average. Interestingly, during this same time, participation in physical education classes dropped from 42% to 25% from 1991-1995. The demise in physical education can be attributed to the significant decrease in academic achievement for school-aged children. While the jury is still out with regard to academic achievement and physical activity, research has shown that an increase in physical activity does not
negatively affect academic performance. Sadly only 90 minutes of Physical Education is *recommended* per week in elementary school, and one year of physical education is required in middle and high schools. Obviously, what we need is more education, not less. A child who is physically healthy is more likely to be academically motivated, alert, and successful. Enforcing and increasing existing physical education requirements may positively influence academic achievement that is such a priority for the federal government and states. Within the scope of determining physical activity benefits for school-aged pupils, motor skill acquisition and fitness levels need to increase. These areas might be considered ‘stand alone” areas of importance, but should be viewed holistically. Developmentally appropriate motor skills will help children be more motor proficient and skilled. Such motor skill acquisition will assist them in being able to better able to perform physical activity. A better and more competent performer will further enhance his/her ability to develop self-efficacy. Self efficacy connotes that children who feel competent in movement will increase the likelihood for participation (Bandura, 1986). More importantly, are the implications for health-related physical fitness levels. Since obesity appears to be a major cause for concern, it is imperative that we examine fitness levels and create or support programming that specifically addresses obesity and increasing physical activity. One gauge for determining health-related physical fitness levels in children is the Prudential FITNESSGRAM (Cooper Institute, 1999). The FITNESSGRAM provides information on all levels of fitness ranging from cardiovascular endurance, flexibility and muscular strength and endurance. These components are essential for an overall healthy lifestyle and a child’s attentiveness in school (Sallis et al, 1999). In this connection, it is plausible that both motor skills and health-related physical fitness should be considered in any quality physical education program; albeit in or
out of school. Careful consideration needs to be made in order to continuously promote quality physical education programs in schools. Yet, the battle continues with schools opting to use additional funds for reading and math achievement. This increase in core academic subjects might lead to a decrease in physical education programs in schools despite the obvious increase in obesity. Specific consideration needs to be made during school or even after school programs in order to address these issues.

After School Program

With the growing epidemic of childhood obesity (USHHS, 2000) as a result of increasing levels of physical inactivity in this country and the fact that nearly two-thirds of children and adolescents live with an employed single parent or two parent household calls for a need to reform education possibly in the form of after-school programs. “After-school programs are emerging as a popular strategy for improving student performance” (Miller, 2001, p. 6). Miller (2001) suggested that participation in after-school programs is associated with higher test scores and grades in lower income pupils. The major goals in educational after-school programs are to improve academic achievement by state standards-based tests and to decrease gaps in academic achievement (Miller, 2001). “Despite their potential, only a minority of after-school programs today is able to meet students’ educational and developmental needs” (Miller, 2001, p. 10). The reason after-school programs fall short is poorly trained leadership, transient staff, and a lack of a clear mission (Miller, 2001). More importantly while the state of Hawaii has implemented an after-school program (A+), it is in need of having curricula that are aligned with programmatic and performance-based outcomes. Since after school programs are already situated in Hawaii
public schools albeit A+ programs, the need to make available curricula that is user-friendly, practical and effective is required.

_Hawaii’s After School Program_

The after-school (A+) Program provides affordable, statewide childcare for latchkey students in all of Hawaii’s public elementary schools after school hours. This program includes after school supervision with homework assistance, enrichment activities, and supervised recreational activities. Services are available from the conclusion of the school day until 5:30 p.m. with no services provided over vacations or breaks. The Hawaii’s A+ program aims to:

- Provide after school supervision for children in stimulating and caring environments.
- Reduce the number of latchkey children.
- Reinforce and expand children’s learning experiences.
- Enhance the relationship between home and school to collaboratively meet children’s needs.
- Improve children's physical fitness.
- Better utilize school facilities.

The A+ program was initiated by the state and serves 27,801 children daily. The state Department of Education is responsible for operational guidelines and procedures, while parents pay a nominal fee of $55.00 per month, per child, however, in many cases parents are unable to pay to amount. Despite the overall success and affordability of the A+ program, structured programs such as physical activity needs to be considered in order to facilitate and produce quality programs. Even with the feasibility of structured programs, academic augmentation can also be viewed as beneficial to latch-key children. Such
augmentation could possibly reinforce the academic arena, which is a priority for federal agencies and educational institutions. To this, the literature is replete with information associated with interdisciplinary teaching and learning, thematic teaching and collaboration. Interestingly, it is plausible to note to that while the information is available in disciplines such as reading and math, a combination of disciplines through empirically related evidence in physical education is lacking. Practical information on the efficacy of interdisciplinary learning has been promoted in physical activity, however with limited empirical evidence.

**Effects of Movement on Academic Achievement**

Infusion of literacy and physical education (PE) for all children might promote and increase in literacy ability and health-related physical fitness. The basis for infusing literacy and physical activity in one program is based on the fact that movement and learning are linked and that quality physical education may positively contribute to academic and intellectual development (Sallis, McKenzie, Kolody, Lewis, Marshall, & Rosengard, 1999) and invigorate an increase in brain cells (Blakemore, 2003). Interdisciplinary learning is a process that integrates two subject areas to further enhance learning in both areas (Cone, Werner, Cone, & Woods, 1998). For children movement is a critical means of communication, expression, and learning (Elliot & Sanders, 2004). As supporting evidence, Payne and Isaacs (2002) found that children who engaged in physical activity prior to other subject matters were more susceptible to learning. Regular physical activity makes children more alert and energetic and can promote clear thinking (Payne & Isaacs, 2002). Rovegno (2003) suggested that literature and dance can be integrated for physical education. To further illustrate, Block (2001) posited that literacy and movement can be reinforced and integrated. Moreover, Nilges (2003) explained how two types of interdisciplinary learning
involving physical education can be formulated. “These types are subject matter from other
subjects, physical education subject matter is included in other content areas and physical
education concepts from the disciplinary base of physical education are taught” (Nilges,
2003, p. 7). As another prime example, Behrman (2004) suggested that writing in physical
education can be accomplished. He offered four benefits for content-area writing: (a)
writing the enhance the understanding of new information, (b) writing can motivate students
to learn and get involved in new physical education activities, (c) students can become
reflective practitioners, and (d) writing is an integral part of physical education. The impetus
for interdisciplinary learning across those with disabilities has also been reported. For
instance, Block and Campbell (2001) found that literacy through movement can be
reinforced for students with hearing disabilities. Hatch and Smith (2004) asserted physical
education can actually be integrated with math and physics. The authors suggested that
specific days can be arranged for physical education, computer and math classes. The
cyclical nature of this integration demonstrates how each component is interwoven and
reinforced across content areas.

According to Sallis et. al (1999) spending more time in physical education has no
harmful effects on standardized academic achievement test scores in elementary school
children. “There was some evidence that a 2-year health-related physical education program
had several significant favorable effects on academic achievement” (Sallis et al., 1999, p.
132). Given the preliminary information on academic achievement in concert with physical
activity, this study employed the interdisciplinary connected model for learning. More
specifically, the connected model encompasses three objectives: “(1) when introducing a
new skill, topic or concept, the teacher can use the content from another subject area to
further explain or illustrate the skill, topic or concept he/she is teaching; (2) teachers can stimulate thinking and interest in a lesson and demonstrate how the content they are teaching is relevant to the student; and (3) the content of a physical education lesson can be used to supplement or reinforce skills, topics and concepts used in other subject area” (Cone et al., 1998, p. 12).

This study provided children with opportunities to participate in physical activity that include supplemental literacy-related components that were planned to enhance literacy skills. To address the variability of reading programs, an attempt was made to provide a generic literacy-enriched program that included: student journal writing with spelling, sight word vocabulary and sentence structure as visible components. The purpose of employing only these selected components was its overall importance on literacy-related information. A combination of literacy and physical activity may further support the literature on the benefits of augmenting both physical activity and literacy together.

Physical activities for this project were adopted from and modified from the Sports, Play, and Active Recreation for Kids (SPARK) physical education program. SPARK has been identified as an exemplary program by the Program Effectiveness Panel of the U.S. Department of Education after careful review of the quality of the instructional materials, the program evaluation design and significance on impact on learner achievements. These goals are based on the Hawaii Content and Performance Standards (1999) for Physical Education and Language Arts: (1) become competent movers (balance, locomotor) in their environment; (2) improve in health-related fitness; and (3) read and interpret passages through movement experiences.
CHAPTER III

METHOD

This chapter highlights the methodology employed in this study. Relevant sections include: participants and sites, research design, instrumentation, instructor training, data collection and data analysis. This chapter concludes with a summary of the chapter.

Participants and Sites

Approval to conduct the research study was sought and obtained from the University of Hawaii at Manoa Office of Research Services (See Appendix A) to insure the health and safety of the participants. Then parental consent forms (See Appendix B) were sent with the participants and returned to the A+ after-school workers. This project filled a much needed void for structured curricula for Hawaii’s after-school program (A+).

The sites for this study were two elementary schools located in the Honolulu District with collaboration from the local Young Men’s Christian Association (YMCA). Specifically, the following elementary schools participated: School K (treatment) and School W (comparison). Thirty-two (3rd and 4th graders with and without disabilities) participated in this study. They ranged from ages 8 – 10 years old with a mean age of eight years and seven months (8.7 years). Participants came from an array of socio-economic status, Title I, free lunch programs, English as a Second Language Learners, to middle class and affluent. Only children with documented learning disabilities (LD) or attention deficit hyperactivity disorder (ADHD) were included in this study. Three percent (3 per site) of children at both sites had either disability or both. Neither school employed a full-time certified physical educator at the time of this study. All participants were enrolled in the A+ after-school
program which takes places Monday thru Friday from the end of the school day until 5:30pm. Table 1 highlights the demographic information and average number of days attended associated with both sites.

Table 1

Demographic information on the number of participants at each site per grade level

<table>
<thead>
<tr>
<th>Sites</th>
<th>3rd Boys // Girls</th>
<th>4th Boys // Girls</th>
<th>Average Attendance (30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School K (n=16)</td>
<td>4 // 4 mean age 8.1</td>
<td>5 // 3 mean age 9.6</td>
<td>19.2</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School W (n=16)</td>
<td>5 // 3 mean age 8</td>
<td>2 // 5 mean age 9.3</td>
<td>19.5</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Participants from treatment School K (n=16) included 3rd and 4th graders. Total enrollment at School K was 383 (Grades P-5th) with 61% of the participants receiving free or reduced-price lunch. Ethnicity breakdown at this site was 1% African American, 69% Asian/Pacific islander, 2% Hispanic, and 27% White. The percentage of the schools total population who participated in the A+ after-school program was 20% at the time of the study. The percentage of participants that met the Hawaii Content and Performance Standards (HCPS II) in reading from was 25% in 2002 for 3rd grade and 43% for 5th grade. Hawaii uses the Stanford 9 to test students in grades 3 through 10 (http://www.greatschools.net/modperl/browse_school/hi/200/4/9/2004). The percentages of teachers at this school who were credentialed were 92% fully licensed and 8% provisional credential. While it was beyond the scope of this study to incorporate teacher credential into the design, it was helpful to note that the majority of teachers are in fact credentialed based on state of Hawaii requirements (Hawaii NCLB School Report, School Year 2002-2003).
Participants from comparison School W (n=16) had an enrollment of 326 (grades P-5th) with 34% of the participants receiving free or reduced-price lunch. Participants' ethnicity breakdown was 1% African American, 78% Asian/Pacific islander, 2% Hispanic, and 18% White. The percentage of the school's total population who participated in the A+ after-school program was 22% at the time of the study. The percentage of participants that met the Hawaii Content and Performance Standards (HCPS II) in reading from School W was 40% in 2002 for 3rd grade and 36% for 5th grade. All teachers employed at this site were professionally credentialed (Hawaii NCLB School Report, School Year 2002-2003).

Research Design

This study employed a Static Group Comparison design (Campbell & Stanley, 1969). The Static Group Comparison design is a pre-experimental design in which a group that has experienced treatment is compared with a group that did not receive treatment.

\[ X \quad \frac{O_1}{O_2} \]

Figure 2: The Static Group Comparison Design

Campbell and Stanley (1969) suggested that "there are no formal means of certifying that the groups would have been equivalent had it not been for the X" (p. 12). More specifically, while random assignment of groups may have been implemented it was not robust enough to warrant our original design (i.e., Randomized Post-Test Only Control Group). Sites were assigned to either treatment or comparison. One site was provided after-school program with literacy enrichment strategies interwoven with physical education (hence treatment X). Two major confounding variables associated with this design are selection and mortality.
**Instrumentation**

An interdisciplinary teaching/learning model (connected model) Literacy Enriched-Physical Education (LE-PE) program was used across two elementary A+ after-school programs, in 45 minute lessons, three times per week for two academic quarters. Both experimental and control groups consisted of a total of 32 3rd and 4th graders for which the LE-PE connected model was implemented. The LE-PE connected model consisted of a language arts (sight words and journal writing) sections and a physical education (modified SPARK curriculum) section (See Appendix C). SPARK was designated by the U.S. Department of Education as an exemplary effective program for grades K-2 and grades 3-6 (McKenzie & Rosengard, 1993). It was adapted and modified with literacy-embedded content for this study. For instance, selected vocabulary words specific to the activity were placed on task cards, read to students and then used in physical activity (for treatment site). The comparison site only received the literacy portion without the SPARK curriculum (See Appendix D). Both the treatment and comparison groups were assessed using the TGMD-2, Prudential FITNESSGRAM, and student journal writing.

*Dependent Variables.* The dependent variables were the TGMD-2 locomotor and object control subtests (Ulrich, 2000), FITNESSGRAM scores (Cooper Institute, 1999; Safrit, 1995), spelling, sight word vocabulary and student journals. Specifically, the TGMD-2 is widely used for children (ages 3-10) of all abilities. Benefits such as ease of scoring, tester knowledge and time were mentioned. Similarly, the FITNESSGRAM is a health-related physical fitness test that measures cardiovascular endurance capabilities, and muscular strength and endurance capacities. Each section of the FITNESSGRAM has multiple advantages and disadvantages. These include, motivating activities for children, highly
correlated with other widely known fitness tests and ease of administration. Disadvantages include time for children to learn activities and tester training (Safrit, 1995). Lap count standards are not recommended for ages five to nine on the aerobic capacity test (Pacer). “Standards have been established to represent a level of fitness that offers some degree of protection against diseases, which result from sedentary living” (Cooper Institute, 1999, p 33). The FITNESSGRAM has two classification for performance: (1) Needs Improvement and (2) Healthy Fitness Zone.

**Independent Variable.** The independent variable constituted the modified SPARK (McKenzie & Rosengard, 1993) curriculum augmented with literacy strategies LE-PE lessons for those 3rd and 4th graders who participated in the after-school A+ program. Selected vocabulary words for each SPARK activity were written on task cards, read aloud to students, and followed by a choral response from students on those words.

**Procedural Integrity.** The degree to which an independent variable is implemented as intended has come to be known as treatment or procedural integrity (Cooper, Heron, & Heward, 1987). Procedural Integrity for this study was established with the use of a procedural integrity checklist (Appendix D). Twenty percent of randomly selected sessions were coded for procedural integrity. A 90% criterion was noted for all noted sessions.

**Training of Instructors**

Three site leaders served as implementers for this study. Instructors were given one 1.5 hour training session on the LE-PE lessons and the design of the study (Appendix E). For instance, at the beginning of each after-school session, instructors were asked to randomly select six activity specific sight words. These sight words were used in task card fashion whereby the instructor showed the word (e.g., volley) and had the children say the word in
unison; which is know as choral responding (Cooper et al., 1987). Prior to the start of the study and after the training the instructors were given a self-instructional examination (See Appendix F) in which a minimum criterion of 80% was needed. Three site instructors were then given the opportunity to ask questions relative to the training and the overall project design. This question and answer session lasted for about 15-minutes with questions ranging from (how long do warm-ups last) to (how many sight words are used during each session). Upon completion of this, all instructors were asked to take a self-instructional examination at the end. All instructors met the minimum criterion of 80%.

Data Collection

Data collection for this study occurred after school from 2:30-4:00pm three days per week (i.e., Tuesday, Thursday, and Friday) for four months (February to May 2004) as a supplement to the language arts and physical education curricula already in place at the targeted sites during the A+ session. Both sites employed the literacy component at the beginning of each session. Specific sight words associated with the SPARK curriculum were transposed onto task cards. A total of 120 words were chosen as a direct result of the SPARK curriculum and age-appropriate vocabulary. Twenty-four words were designated for each activity unit, six lessons per unit of SPARK. For each session, the instructor randomly selected (via shuffle) six words. For those selected sight words, the instructor held up each word card, said the word and waited for the choral response from all children. Upon completion of the choral responding, the instructor sought definitions or meanings of those words by asking for volunteers. If participants failed to respond, the instructor provided definitions for the words.
Physical activities for this study were adopted from and modified as needed from the SPARK physical education program. After careful review of the quality of the instructional materials, the program evaluation design and significance on impact on learner achievements were measured. More specifically the following SPARK activities were selected based on the Hawaii Content and Performance Standards (HCPS II): aerobic games, basketball, Frisbee, soccer and volleyball. To reiterate, specific sight words were extrapolated from each of the above mentioned SPARK activities.

For School W (comparison), completion of choral responding and teacher directed definitions, students were asked to write in their journals, the sight words just learned, definitions, and to use the word in a sentence. Lastly all pupils were asked to write about their feelings toward the lesson.

For School K (treatment), completion of choral responding and teacher directed definitions; pupils were given the modified SPARK lesson. The site instructor followed each SPARK lesson (e.g., basketball) directly from the curriculum. Completing the SPARK lesson, pupils were then asked to write in their journals, the sight words learned at the beginning, definitions, and to use the word in a sentence. Similar to the comparison site, the treatment site also wrote about how they felt about the lesson.

Data Analysis

Data were analyzed both descriptively and inferentially. More specifically, descriptive measures (i.e., means, standard deviations, and percentages) and inferential measures (i.e., Analysis of Variance) were the primary modes used in the analyses (Thomas & Nelson, 2001; Vincent, 1999). Percentages were reported for all FITNESSGRAM (Cooper Institute, 1999) data since these were scored categorically. Inferential statistics were included for
locomotor and object control scores garnered from the Test of Gross Motor Development-2 (Ulrich, 2000) and literacy scores (journal writing via numerical values) generated by assessing spelling, sight word vocabulary and sentence structure via a rubric (See Appendix G).

Summary

The purpose of this study was to compare an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders at two-elementary schools on their motor skills, fitness levels and literacy skills during an after-school program. Research areas addressed were: (1) health-related physical fitness, (2) locomotor and object control skills, and (3) literacy components: sight word vocabulary, definitions and sentence structure. Procedural strategies related to LE-PE treatment, Static Group Comparison Design, data collection for 30 sessions across four months and data analysis provided appropriate and empirically defensible methods for accomplishing the purpose of this study.
CHAPTER IV

RESULTS

This chapter presents the results collected during the study. The chapter was divided into the following sections: (a) introduction, (b) descriptive statistics for the Prudential FITNESSGRAM, (c) descriptive and inferential statistics for TGMD-2 (locomotor and object control sub-tests), (d) sight words, spelling and sentence structure via literacy rubrics, and (e) discussion section.

Introduction

The purpose of this study was to compare an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders at two-elementary schools on their motor skills, fitness levels and literacy skills during an after-school program. In this regard, the following research statements for this study were:

1. To describe the health-related physical fitness levels for 3rd and 4th graders at two elementary schools who are provided with an after-school interdisciplinary connected model of physical activity and literacy as measured by the Prudential FITNESSGRAM.

2. There will no be difference in locomotor performance and object control skills for 3rd and 4th graders at two elementary schools who are provided with an after-school interdisciplinary connected model of physical activity and literacy as measured by the TGMD-2.

3. There will be no difference in literacy via student journals for 3rd and 4th graders at two elementary schools who provided with an after-school interdisciplinary connected model of physical activity and literacy.
In this study, thirty-two 3rd and 4th graders with and without disabilities across two elementary schools enrolled in the A+ after school program. The amount (and disability types) of participants was not under the control of this study, since participants volunteer for the A+ program. However, it was noted that 3% of the total participants across both sites had a documented disability. Participants with disabilities, however, were not singled out for this study. They were included in the total number of participants (N= 32). In addition, since random assignment of participants was not feasible, random assignment of sites (treatment and comparison) was completed. Given this view, Table 2 highlights the demographics of participants across treatment and comparison sites.

Table 2

Demographics for 3rd and 4th graders for both Comparison and Treatment Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>%</th>
<th>m</th>
</tr>
</thead>
<tbody>
<tr>
<td>School W (Comparison)</td>
<td>16</td>
<td></td>
<td>9.19</td>
</tr>
<tr>
<td>male</td>
<td>9</td>
<td>56.25%</td>
<td>9.11</td>
</tr>
<tr>
<td>female</td>
<td>7</td>
<td>43.75%</td>
<td>9.29</td>
</tr>
<tr>
<td>grade 3</td>
<td>7(5m,2f)</td>
<td>71.43%m, 28.57%f</td>
<td>8.8m,8.5f</td>
</tr>
<tr>
<td>grade 4</td>
<td>9(4m,5f)</td>
<td>44.44%m, 55.55%f</td>
<td>9.5m,9.6f</td>
</tr>
<tr>
<td>School K (Treatment)</td>
<td>16</td>
<td></td>
<td>9.41</td>
</tr>
<tr>
<td>male</td>
<td>9</td>
<td>56.25%</td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>7</td>
<td>43.75%</td>
<td></td>
</tr>
<tr>
<td>grade 3</td>
<td>7(3m,4f)</td>
<td>42.86%m, 57.14%f</td>
<td>8.33m,8.25f</td>
</tr>
<tr>
<td>grade 4</td>
<td>9(6m,3f)</td>
<td>66.66%m, 33.33%f</td>
<td>9.33m,10f</td>
</tr>
</tbody>
</table>

Prudential FITNESSGRAM Results

Participants were measured on the Prudential FITNESSGRAM test. This test included muscular strength and endurance, cardiovascular endurance and flexibility. Data were collected for the FITNESSGRAM on two separate afternoons for each site.

To explain the first research statement, test scores were tallied and reported using percentages. The Prudential FITNESSGRAM includes five measures of health-related
fitness: Aerobic Endurance (Pacer), Abdominal Endurance (Curl-Up), Muscular Strength (Push-Up), Flexibility (Trunk Lift, Shoulder Stretch left and right arms), and body composition. The body composition was the only measure not taken in this study. Since all components are categorical in nature, percentages were calculated to ascertain the amount of those met the "healthy zone" criterion. The healthy zone concept purports that children within specified age groups should be able to demonstrate skills within a range of scores. Table 3 described the actual number of 3rd and 4th graders from the Comparison site who participated along with percentage scores.

Table 3

Combined Percentage Scores on Prudential FITNESSGRAM for 3rd and 4th Graders With and Without Disabilities at Comparison Site (School W)

<table>
<thead>
<tr>
<th></th>
<th>Comparison (n=16)</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pacer Run</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participated</td>
<td></td>
<td>15</td>
<td>93.75</td>
</tr>
<tr>
<td>Did not participate</td>
<td></td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td><strong>Curl-up</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td></td>
<td>7</td>
<td>43.75</td>
</tr>
<tr>
<td>Not Met</td>
<td></td>
<td>9</td>
<td>56.25</td>
</tr>
<tr>
<td><strong>Push-up</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td></td>
<td>10</td>
<td>62.50</td>
</tr>
<tr>
<td>Not Met</td>
<td></td>
<td>6</td>
<td>37.50</td>
</tr>
<tr>
<td><strong>Trunk Lift</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td></td>
<td>14</td>
<td>87.50</td>
</tr>
<tr>
<td>Not Met</td>
<td></td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td><strong>Left Shoulder Stretch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td></td>
<td>10</td>
<td>62.50</td>
</tr>
<tr>
<td>Not Met</td>
<td></td>
<td>6</td>
<td>37.50</td>
</tr>
<tr>
<td><strong>Right Shoulder Stretch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td></td>
<td>13</td>
<td>81.25</td>
</tr>
<tr>
<td>Not Met</td>
<td></td>
<td>3</td>
<td>18.75</td>
</tr>
</tbody>
</table>
Treatment percentage scores have been tallied for the Treatment Site (School K).

Percentages across the FITNESSGRAM revealed similar scores when compared to Comparison site.

Table 4

Combined Percentage Scores on Prudential FITNESSGRAM for 3rd and 4th Graders With and Without Disabilities at Treatment Site (School K)

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pacer Run</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participated</td>
<td>12</td>
<td>75.00</td>
</tr>
<tr>
<td>Did not participate</td>
<td>4</td>
<td>25.00</td>
</tr>
<tr>
<td><strong>Curl-up</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>4</td>
<td>25.00</td>
</tr>
<tr>
<td>Not Met</td>
<td>12</td>
<td>75.00</td>
</tr>
<tr>
<td><strong>Push-up</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Not Met</td>
<td>11</td>
<td>68.75</td>
</tr>
<tr>
<td><strong>Trunk Lift</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>14</td>
<td>87.50</td>
</tr>
<tr>
<td>Not Met</td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td><strong>Left Shoulder Stretch</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>11</td>
<td>68.75</td>
</tr>
<tr>
<td>Not Met</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td><strong>Right Shoulder Stretch</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met</td>
<td>12</td>
<td>75.00</td>
</tr>
<tr>
<td>Not Met</td>
<td>4</td>
<td>25.00</td>
</tr>
</tbody>
</table>

Test of Gross Motor-2 Results

Since not all the same participants were involved in the FITNESSGRAM, another set of demographic information was gathered. Due to attendance and tracking of participants across both sites, and participants coming and going freely, another set had to be reported.

In order to maintain consistency and rigor, we re-analyzed the data as a separate entity from the FITNESSGRAM. To address the second research statement, data were analyzed using MINITAB One-way Analysis of Variance test. Table 5 provides the demographic
information on participants at both sites. TGMD2 is made up of 12 skills (six for each subtest): *Locomotor*: run, gallop, hop, leap, horizontal jump, and slide. *Object Control*: striking a stationary ball, stationary dribble, kick, catch, overhand throw, and underhand roll.

Table 5

Demographic Statistics of Test of Gross Motor Development-2

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>%</th>
<th>MS</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison</td>
<td>16</td>
<td></td>
<td>9.06</td>
<td>6.97</td>
</tr>
<tr>
<td>male</td>
<td>8</td>
<td>50%</td>
<td>9.13</td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>8</td>
<td>50%</td>
<td>9.13</td>
<td></td>
</tr>
<tr>
<td>grade 3</td>
<td>8</td>
<td>62.5%m,37.5%f</td>
<td>8.6m,8.33f</td>
<td></td>
</tr>
<tr>
<td>grade 4</td>
<td>8</td>
<td>37.5%m,62.5%f</td>
<td>9.66m,9.6f</td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>15</td>
<td></td>
<td>8.87</td>
<td>7.84</td>
</tr>
<tr>
<td>male</td>
<td>9</td>
<td>60%</td>
<td>8.89</td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>6</td>
<td>40%</td>
<td>8.83</td>
<td></td>
</tr>
<tr>
<td>grade 3</td>
<td>8</td>
<td>50%m,50%f</td>
<td>8m,8.25f</td>
<td></td>
</tr>
<tr>
<td>grade 4</td>
<td>7</td>
<td>71.14%m,28.57%f</td>
<td>9.6m,10f</td>
<td></td>
</tr>
</tbody>
</table>

Descriptive Statistics for TGMD-2

Test scores for gross motor and object control were tabulated and analyzed using a parametric measurement, the MINITAB One-way Analysis of Variance (ANOVA) test (MINITAB Statistical Software, 1999). The descriptive statistics for the TGMD-2 are summarized in Table 6.
Table 6

*Mean Score and Range-Age Equivalent Scores for TGMD-2 Locomotor (LM) and Object Control (OC)*

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>Range-Age Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LM</td>
<td>OC</td>
</tr>
<tr>
<td>Comparison</td>
<td>18.37</td>
<td>34.87</td>
</tr>
<tr>
<td>(n=16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>23.66</td>
<td>32.00</td>
</tr>
<tr>
<td>(n=15)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Inferential Statistics for Locomotor**

Results from a one-way analysis of variance revealed a significant difference between the treatment and comparison sites $F(1, 30) = 6.30, p < 0.05$ (Table 6). This finding appears to be directly attributed to the SPARK curriculum during intervention. More specifically, increased repetition and quality practice can promote an increase in motor ability and self-confidence. Despite the overall average participation days (19.5 days out of 30), those receiving the SPARK curriculum performed better than the comparison group. Hence, it appears logical and relevant that treatment with LE-PE augmented with literacy might have reinforced these findings.

Table 7

*One-way Analysis of Variance for Raw Score Locomotor versus Site*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE</td>
<td>1</td>
<td>118.8</td>
<td>118.8</td>
<td>6.30</td>
<td>0.018*</td>
<td>0.90</td>
</tr>
<tr>
<td>Error</td>
<td>29</td>
<td>546.3</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>665.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* $p < 0.05$
Inferential Statistics for Object Control

One-way analysis of variance results revealed no significant difference between treatment group and the comparison groups $F(1,30) = 2.52, p > 0.05$ (Table 8). Since object control skills are more difficult to acquire than locomotor skills, and that the SPARK curriculum addressed a myriad of activities, object control was not found to differ between sites. However, a closer examination of results indicates that object control scores were approaching significance. This may mean that with a longer intervention, more structured physical education programming and better attendance in the A+ program may yield statistically significant results.

Table 8

*One-way Analysis of Variance for Raw Score Object Control versus Site*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE</td>
<td>1</td>
<td>64.0</td>
<td>64.0</td>
<td>2.52</td>
<td>0.124</td>
<td>0.56</td>
</tr>
<tr>
<td>Error</td>
<td>29</td>
<td>737.8</td>
<td>25.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>801.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Age equivalent scores.* The age equivalent locomotor scores for the control group ranged from a low (< less than) three years of age and to a high of 4.3 (i.e., 4-years and 3-months). No 3rd or 4th grader in the control group scored in the proper age equivalent range. The age equivalent object control scores for the comparison group ranged from a low of 4.9 years of age and to a high of 9.3 years. Approximately 12.5% of those who were in the control group scored at or above age equivalence with 87.5% scoring below the age equivalent range.

The age equivalent locomotor scores for the treatment group ranged from a low of less than 3.0 (< 3.0 years) to a high of 5.6 years of age. Interestingly, no students in the treatment group scored in the age equivalent range. The age equivalent object control scores
for the locomotor (<3.6) ranged from a low of 4.6 years to a high of 7.9 years of age. Similarly, no students in the treatment group scored in the proper age equivalent range.

Literacy results

The final research question addressed the relevant literacy data from this study. The importance of improving literacy within schools continues to be a priority for the Federal Government (P.L. 100-107, No Child Left Behind). Reading and math continues to be high priority content for school accountability. Within the context of this study in connection with the Interdisciplinary Teaching Model, a participant’s score was summated to reveal an overall score. Three major areas related to literacy were calculated: sight word, spelling and sentence structure. Sight word suggests that the child was able to recognize and say the word during intervention. Spelling was calculated using a simple yes/no response. Did the child spell the word correctly? – yes or no. Sentence structure was measured by determining subject/verb agreement for each sentence. Each category was scored either 1 = less than three sight words correct; 2 = three, four and five sight words correct and 3 = all sight words correct. Scores were then summated for an overall score. A low score of 3 or a high score of 9 could be obtained at each session. A minimum total score ranged from 33 through 270. Results from a One-way Analysis of Variance reveal no significant difference across literacy scores when sight word, spelling and sentence structure were combined (Table 9).
Table 9

*Summated Sight Word, Spelling and Sentence Structure for Literacy Scores*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq SS</th>
<th>Adj SS</th>
<th>Adj MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>school</td>
<td>1</td>
<td>27</td>
<td>84</td>
<td>84</td>
<td>0.07</td>
<td>0.789</td>
</tr>
<tr>
<td>grade</td>
<td>1</td>
<td>2354</td>
<td>2568</td>
<td>2568</td>
<td>2.24</td>
<td>0.146</td>
</tr>
<tr>
<td>gender</td>
<td>1</td>
<td>579</td>
<td>579</td>
<td>579</td>
<td>0.50</td>
<td>0.484</td>
</tr>
<tr>
<td>Error</td>
<td>27</td>
<td>31008</td>
<td>31008</td>
<td>1148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>33969</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

This section highlighted the results associated with this study. This study sought the inclusion of 3rd, 4th and 5th graders with and without disabilities as part of the original study; however, for the final analysis only 3rd and 4th graders’ with and without disabilities usable and reportable data were collected and calculated. Fifth graders were eliminated from the data collection since only a total of three 5th graders across both sites had usable and reportable data.

Findings presented in this study were vulnerable to limitations and restrictions traditionally associated with pre-experimental design (i.e., Static Group Comparison): selection and mortality. Since restrictions on random assignment were clearly evident, and the use of intact sites, strategies to counter these were minimal at best. Efforts to randomly assign sites to either treatment or control were the only available means to demonstrating an experimental control. The selection of this pre-experimental design was conceived largely due to our inability to gather pre-test data in a timely fashion and minimal random selection and assignment. Campbell and Stanley (1969) caution on using pre-experimental designs (e.g., selection and mortality); however, to best address the purpose of this study and with its limitations, the Static Group Comparison served this study adequately. More specifically,
while the integrity of the design was promoted, the unit of analysis was problematic. The internal validity (selection and mortality) of this study may have been compromised in that participants differed from FITNESSGRAM, TGMD-2 and literacy results perhaps from the beginning. This did in fact have had a profound effect for the data overall. Perhaps tracking only those who participated in all dependent measures would have produced different results, or obtaining a pretest measure may have documented noticeable differences from the beginning. Similarly, mortality was another confound associated with this study. The A+ program is not a requirement per se for children to enroll. They may or may not come to A+ for a variety of reasons. Some children participate in little league baseball and AYSO soccer programs and therefore left immediately after school. Hence, the mortality rate was significant in the overall results of this study. Even with site leader prompting, children still left A+ early for other destinations. Despite the overall compromise to internal validity, several usable and notable results were found.

*Aerobic Endurance (Pacer).* Aerobic capacity was measured via the Pacer run. The Prudential FITNESSGRAM states that children up to age 10 do not have any criterion level for acceptable aerobic fitness. As such, it was recommended that children up to age 10 be allowed to participate without any specified criterion. More specifically, Cooper Institute (1999) suggested that “teachers of grades K-3 are encouraged to use the Pacer with an emphasis on having a good time while learning how to take the test, and not desirable to have them run until exhaustion” (p. 11). Hence, both treatment and comparison sites 3rd and 4th graders with and without disabilities were asked only to participate and to have fun. No formal scoring was completed except whether or not they participated. Interestingly, Hopple and Graham (1995) indicated that the mile-run was not favorable for elementary-aged
children, especially since this test was developed by adults. The authors further noted that children’s dislike for the mile-run was due to their understanding and value. In this connection, it appears that the data reported here, aligns with the notion that aerobic endurance test as a whole are not well-liked by children.

**Abdominal Endurance (Curl-Up).** Forty-three percent of third and fourth graders at the Comparison site met the curl-up criterion for the FITNESSGRAM, while only 25% met the criterion level at the treatment site. Treatment site did not flair much better in that only 25% met the criterion level and 75% did not. Interestingly, the “healthy zone” for the curl-up indicates that children ages 8-10 should score within 9 – 26 of the number completed. Yet, nearly one-half of both groups did not meet the criterion level. Perhaps, random assignment of participants to treatment or comparison could have influenced the results. Since attrition and inconsistent participation were potential confounding variables, and may have attributed to the fact that most of these children did not receive quality physical education programs at their respective sites. Even more interesting, is the relationship between cardiovascular fitness and the curl-up. Participant’s apparent dismay for the mile-run (Hopple & Graham, 1995) correlates with the curl-up tests. This may further explain why minimal percentage differences between sites were found.

**Upper Body Strength (Push-up).** Percentage scores are provided in Table 3 and 4 for the push-up category. Comparison site participants’ percentages were higher when compared to treatment site, 62.50% and 31.25%, respectively. This finding might be considered nebulous since, the majority of 3rd and 4th graders from either site experienced little if any physical education during school and their lack of consistent attendance during the treatment. Moreover, since limited amounts of cardiovascular endurance activities are
made available, and the correlation between cardiovascular endurance and muscular strength and endurance, it appears logical that by not having any form of fitness activities minimizes the quality and quantity of overall fitness improvement (Flohr & Williams, 1997).

**Flexibility.** Flexibility (Trunk Lift, Left and Right Shoulder) percentages scores are reported in Tables 3 and 4. Comparison sites percentages for trunk lift revealed 87.50% met the criterion level, while only 2% did not meet this level. Left shoulder stretch found 62.50% meeting the criterion and 37.50 who did not. Right shoulder stretch reported that 81.25% met the criterion level and 18.75% who did not. Comparatively speaking, the treatment site report very similar results. For the trunk lift, percentage scores were identical to the comparison site. The left shoulder stretch revealed 68.75% meeting the criterion, while 31.25% did not. Right shoulder stretch had 75% who met the criterion and 25% who did not meet the criterion. Close examination of these percentages across flexibility categories shows little to no changes. This could be attributed to the fact that while the treatment site received the SPARK curriculum, warming up was not enough for a potential increase in flexibility.

Warm-ups alone do not constitute appropriate flexibility for children. Yet, it does appear that many physical education programs address flexibility during warm-up activities only. Given this, and with no formal physical education program, it does seem that participants at both sites did not receive any formal instruction in flexibility and that intervention during this study was not robust enough especially for flexibility.

For the TGMD-2 sub-test and Literacy scores MINITAB One-way Analysis of Variance test was used to determine differences in treatment. Specifically, no significant differences
between object control scores $F(1,30)=2.52, p > 0.05$ and summated literacy scores across Sites $F(1,27)=0.07, p > 0.05$, Grade $F(1,27)=2.24, p > 0.05$, and Gender $F(1,27)=0.50, p > 0.05$ were found. There appears to be a pattern related to the non-significant findings for the above mentioned variables of interest associated with this study. First, the high rate of mortality contributed to the overall non-significance of results for the TGMD-2 object control sub-test and literacy scores. Campbell and Stanley (1969) reported that mortality might be prevalent confound associated with the Static Group Comparison pre-experimental design. Children elected not to come to A+. This was further evident by the average attendance (19.5 days out of 30) for sites. When children do have enough practice or repetition of skills, chances are these skills might develop into mature patterns. In addition to increasing practice time for motor skills, this study did not consider the myriad of reading programs employed by sites. Since multiple reading programs are used by sites, it may have assisted in producing ambiguous results for this study. Hence, the only significance found was related to the locomotor skills on the TGMD-2 $F(1,30) = 6.30, p < 0.05$. By not participating in the A+ program showed that participants did not receive the quantity or quality of treatment. This finding does not appear surprising since the treatment site employed the SPARK curriculum and the comparison site did not. This lends credence to the need for structured physical education programs for after school programs especially if taught by either a specialist or trained teacher (Sallis et al., 1999). Incorrect or immature patterns might be developed and even reinforced when taught by a classroom teacher only. This finding might also be true since both sites did not employ a physical education specialist. Since both sites received physical education by the classroom teacher (generalist), improvement and maturation of motor skills might be untenable. To this, the
literature supports the notion that physical education is taught by a specialist, children will enjoy physical education, and feel more competent in their movement (Murata & Maeda, in press). Sallis et al. (1999) found that locomotor skills can improve without adversely affecting academic, while Murata and Maeda (in-press) found enjoyment of physical education by 3rd and 4th graders when they were taught by a specialist. Finally, the teacher backgrounds may have influenced these results. Even though background information was not targeted, it may have had an influence on these results. Procedural integrity of the protocol was high in that both sites did in fact adhere to the protocol.

Intervention did not appear robust enough to show how an interdisciplinary connected teaching model with language enriched improved both literacy and motor skills. When comparisons were made between sites and grade levels, percentage scores did not differ as a function intervention. This could be the direct results of the myriad of reading programs and to what extent a specific reading program was used. Specific reading programs were not investigated as part of this study. Also the specific amount of time devoted to reading at each site was not measured. Taken together, even though every effort was made to support the interdisciplinary connected teaching model, this was not the case with the findings.

Addressing the following overall goals related to physical education and language arts formed the fundamental basis for this study. Since the interdisciplinary connected teaching model was used as the conceptual framework, it was interestingly to empirically determine if in fact such a model served its purpose. Despite efforts to closely align both content areas, it was difficult to show the relationship between the two from an empirical standpoint. Cone et al., (1998) do not offer the empirical basis for such an interdisciplinary connected teaching model. What was articulated was the practical implications of the model and how
separate content areas can be interwoven to support and strengthen each other. This type of interdisciplinary teaching is supported by elementary teachers throughout the state. To this end, the need to empirically validate this model was deemed necessary for the support or continued demise of physical education programs.

Overall there were no major findings associated with this study. Despite efforts to validate the Interdisciplinary Connected Teaching Model, empirical evidence does not lend credence for this model during this study. Consideration for empirically validating how each content area can actually be interwoven needs to be established before hand. The practical implications of the model appears logical, however, the actual connection of content areas appears difficult at this time. Moreover, the logical association of elements and stages for implementing the model was clear, but the reinforcement of selected literacy content within physical education was not made here. This is not to say that the model was ineffective or illogical; what this study found was that reinforcement of a secondary area (literacy), interwoven with a primary area (physical education) needs further investigation.
CHAPTER V

SUMMARY AND CONCLUSION

Chapter V summarizes this research study, and offers a conclusion and recommendations. To that end, the chapter is divided into two sections. Section One summarizes the purpose and procedures of this study along with the results based on the study's research questions. The final section identifies areas in which future research inquiry is recommended.

Summary

This study sought to compare an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders at two-elementary schools on their motor skills, fitness levels and literacy skills during an after-school program. This section addressed the research statements for this study and made recommendations for further study.

Research Statements

The following research statements were addressed:

1. To describe the health-related fitness levels for 3rd and 4th graders at two elementary schools who are provided with an after-school interdisciplinary connected teaching model of literacy and physical activity as measured by the Prudential FITNESSGRAM?

Percentage scores were similar between both treatment and comparison sites. Even though the distribution of participants was relatively equal across sites, no robust differences between them were noted. This finding provides some evidence that 3rd and 4th graders with and without disabilities are similar in health-related physical fitness levels. While some
comparison site participants scored higher on push-ups and curl-ups, flexibility categories were very similar. Given these data, it appears that overall 3rd and 4th graders with and without disabilities scored higher on flexibility, but were lower on muscle strengthen and endurance. The LE-PE treatment did not appear to be robust enough to warrant any significant relationship or an increase in health-related physical fitness levels.

2. There will be no difference in locomotor performance and object control skills for 3rd and 4th graders from two elementary schools who provided with an after-school interdisciplinary connected teaching model of literacy and physical activity as measured by the TGMD-2?

Results from an ANOVA test revealed a significant difference between the treatment and comparison groups on the locomotor portion of the TGMD-2. Significant gains were noted for the treatment group during this investigation, since 3rd and 4th graders received the LE-PE treatment. However, ANOVA results revealed no significant differences between the treatment and comparison groups on the object control portion of the TGMD-2, confirming the null hypothesis in that no differences were observed.

3. There will be no difference in literacy via student journals for 3rd and 4th graders from two elementary schools who are provided with an after-school interdisciplinary connected teaching model of literacy and physical as measured by the literacy rubric?

Summated literacy scores across sight word spelling, definitions and sentence structure were tabulated and analyzed. Based on the ANOVA analysis, no significant difference across the variables of interest were found between treatment and comparison groups when sight word spelling, definitions and sentence structure were combined using a literacy scoring rubric, confirming the hypothesis of no difference.
Recommendations

1. A study with a larger number of participants should be conducted using an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders during an after-school program.

2. A study with a longer intervention period to permit more time and opportunities for improvement in motor skills, fitness levels and literacy skills should be conducted using an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders during an after-school program.

3. A study incorporating pre-test measures on motor skills, fitness levels and literacy skills should be conducted using an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders during an after-school program.

4. A study that has a more comprehensive approach to assess the literacy intervention should be conducted using an interdisciplinary connected teaching model involving literacy and physical activity for 3rd and 4th graders during an after-school program.

5. A study validating the interdisciplinary teaching model should be conducted in order to provide further empirical evidence.
References


APPENDIX A:
Approval for Research
Protection of Human Subjects
Assurance Identification/IRB Certification/Declaration of Exemption
University of Hawaii at Manoa Research Services
**Protection of Human Subjects**

**Assurance Identification/IRB Certification/Declaration of Exemption**

(Common Rule)

Policy: Research activities involving human subjects may not be conducted or supported by the Departments and Agencies adopting the Common Rule (56FR28003, June 18, 1991) unless the activities are exempt from or approved in accordance with the Common Rule. See section 101(b) of the Common Rule for exemptions. Institutions submitting applications or proposals for support must submit certification of appropriate Institutional Review Board (IRB) review and approval to the Department or Agency in accordance with the Common Rule.

<table>
<thead>
<tr>
<th>1. Request Type</th>
<th>2. Type of Mechanism</th>
<th>3. Name of Federal Department or Agency and, if known, Application or Proposal Identification No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[X] ORIGINAL</td>
<td>[X] GRANT</td>
<td>University of South Florida</td>
</tr>
<tr>
<td>[ ] CONTINUATION</td>
<td>[ ] CONTRACT</td>
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</tr>
<tr>
<td>[ ] EXEMPTION</td>
<td>[ ] COOPERATIVE AGREEMENT</td>
<td></td>
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<td></td>
<td>[ ] OTHER:</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>4. Title of Application or Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Project Literacy Enriched - Physical Education (LE-PE)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Name of Principal Investigator, Program Director, Fellow, or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathan Murata, Ph.D.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Assurance Status of this Project (Respond to one of the following)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[X] This Assurance, on file with Department of Health and Human Services, covers this activity: Assurance Identification No. F-3526 , the expiration date October 15, 2005 IRB Registration No. IORG0000169</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Certification of IRB Review (Respond to one of the following IF you have an Assurance on file)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[X] This activity has been reviewed and approved by the IRB in accordance with the Common Rule and any other governing regulations. by: [ ] Full IRB Review on (date of IRB meeting) , or [X] Expedited Review on September 2, 2003</td>
</tr>
<tr>
<td>[ ] If less than one year approval, provide expiration date</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>8. Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS #12543</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. The official signing below certifies that the information provided above is correct and that, as required, future reviews will be performed until study closure and certification will be provided.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Phone No. (with area code) (808) 956-5007</td>
</tr>
<tr>
<td>12. Fax No. (with area code) (808) 539-3954</td>
</tr>
<tr>
<td>13. Email: <a href="mailto:dendle@hawaii.edu">dendle@hawaii.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. Name of Official</th>
</tr>
</thead>
<tbody>
<tr>
<td>William H. Dendle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15. Title</th>
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</thead>
<tbody>
<tr>
<td>Compliance Officer</td>
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</table>

<table>
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<tr>
<th>16. Signature</th>
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<table>
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<tr>
<th>17. Date</th>
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<tbody>
<tr>
<td>9/3/03</td>
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</tbody>
</table>

**Additional Information:**

Public reporting burden for this collection of information is estimated to average less than an hour per response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: OS Reports Clearance Officer, Room 503 200 Independence Avenue, SW., Washington, DC 20201. Do not return the completed form to this address.
APPENDIX B:
Agreement to Participate Form
November 24, 2003

Dear Parents,

The University of Hawaii, through a federal grant, would like to conduct a pilot program for our A+ Plus 3rd and 4th graders focused on literacy enriched-physical education. This program would influence physical activity level and reading for participating children.

The Kaimuki-Waialae YMCA supports the project and sees the positive benefits of these experiences. We would like to invite your child to participate in this program scheduled to start in January 2004. Your child will participate in a 2-hour session, three times a week for two school quarters. Children will be involved in a physical activity curriculum that has been augmented with literacy-enriched activities lead by your child's group leader.

Please review the attached “Agreement To Participate In” form. If you would like your child to participate in this physical education/literacy program, complete form and return to your child’s group leader by Wednesday, December 3rd. If you have any questions, please call us at 737-5544.

I hope you will take advantage of this great educational opportunity provided by the University of Hawaii’s College of Education.

Sincerely,

Richard Bautista
Senior Program Director

Nelson Higa
Executive Director
Purpose

We are conducting a program to examine how a literacy enriched-physical education program influences physical activity levels and reading for 3rd graders with and without special needs who participate in the A+ after-school program.

Procedures

Your third grader will participate in a 2-hour, three times (3x) per week sessions for two academic quarters, starting January 2004. He/she will be involved in either a supervised free-play session or receive treatment in the form of a physical activity curriculum that has been augmented with literacy-enriched activities (e.g., reading stories and poems associated with physical activity, writing assignments and read aloud associated with physical activity and sight word vocabulary in connection with physical activity). Please know that your child's current reading curriculum and program employed at his/her school will not be affected. The YMCA has given permission to work with their group and site leaders in order to assist me in implementing this project.

Risks

I see no foreseeable risks to your child for participating in this research study. Participation in this research study is strictly voluntary and you, your child and the YMCA are free to withdraw at anytime.

Confidentiality

Your child's name will be held in strict confidence; it will be known only to individuals involved in the project and will not be released. All data taken during the study will be stored in a locked file cabinet at the University and be made available only to the project director.

Benefits

Although the benefits might be subtle, we believe that an increased opportunity to employ both physical activity and reading simultaneously will benefit your child's physical activity level and perhaps increase his/her enjoyment of reading. Similarly information obtained from this project may guide educators towards a better understanding on how to integrate their teaching across the curriculum.

Certifications

I certify that I have read and understand the above statement, been given satisfactory answers to my questions concerning project procedures and other matters; and that I have been advised that I am free to withdraw my child’s consent and discontinue participation in the project at any time.
without prejudice. If I am not totally satisfied and still have questions, the researcher named above will be contacted for further clarification.

I consent to my child’s participation in this project with the understanding that such consent does not waive any of my legal rights, nor does it release the principal investigator or the institution or any employee or agent thereof from liability for negligence.

Signatures

Signature of Child
Date

Signature of Parent
Date

Nathan M. Murata, PhD., Project Director
Date

(If you cannot obtain answers to your questions or have comments or complaints about your treatment in this study, contact: Committee on Human Studies, University of Hawaii, 2540 Maile Way, Honolulu, HI 96822. Phone: (808) 956-5007)

cc: Signed copy to Participant
APPENDIX C:
Literacy Enriched-Physical Education (LE-PE)
Treatment Group Lesson Plans
AEROBIC GAMES UNIT
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON ONE: AEROBIC GAMES  Week: 1  Session: 1

Activity Title (15-minutes): Unit Aerobic Games; Lesson 1 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Locomotor skills, chasing, fleeing, dodging, agility & endurance

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
### UNIT: AEROBIC GAMES

### LESSON: 1

#### OBJECTIVES
Locomotor skills, agility, chasing, fleeing, dodging, endurance, healthy food choices

#### EQUIPMENT
- 4 cones for boundaries, 5-6 scarves or pinnies to designate "It";
- music or whistle

### ACTIVITY ORGANIZATION TEACHING CUES

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag</td>
<td>- Scattered within large boundaries.</td>
<td>- Rules for tag games:</td>
</tr>
<tr>
<td></td>
<td>- Playing area: 20 by 20 paces (yards).</td>
<td>1) Soft, safe tags with two fingers at the shoulders or below only.</td>
</tr>
<tr>
<td></td>
<td>- Designate 5-6 players to be &quot;It&quot;.</td>
<td>2) &quot;Its&quot; may not tag back.</td>
</tr>
<tr>
<td></td>
<td>- These chase the others who attempt to avoid them.</td>
<td>3) The &quot;Chased&quot; go before the &quot;Its&quot; start.</td>
</tr>
<tr>
<td></td>
<td>- Any child who is tagged takes the &quot;scarf&quot; and attempts to tag others.</td>
<td>4) &quot;Chased&quot; automatically become &quot;It&quot; if they run out of bounds to avoid being tagged.</td>
</tr>
<tr>
<td></td>
<td>- Variation: Change the locomotor movements--skip, jump, hop, slide, etc.</td>
<td></td>
</tr>
</tbody>
</table>

| Safe Tag   | - As above, except students may avoid being tagged by doing something safe (e.g., squat down and name a state capitol or healthy food). | - This time, if you say the name of your favorite vegetable before you are tagged, you cannot be it! |
|            | - Players may stay "safe" for a maximum of 5 seconds. |                                                                                   |
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON TWO: AEROBIC GAMES Week: 1 Session: 2

Activity Title (15-minutes): Unit Aerobic Games; Lesson 2 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Locomotor skills, chasing, fleeing, dodging & endurance

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

- Have students write down each sight vocabulary word used during the lesson.
- Have students write down the definition for each sight vocabulary word used during the lesson.
- Have students use each sight vocabulary word used during the lesson in a sentence.
- Have students write down their reflections and any questions that they have about the lesson.
### UNIT: AEROBIC GAMES

**OBJECTIVES**

Locomotor skills, chasing, fleeing, dodging, endurance, cooperation

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition Tag</td>
<td>- Scattered formation.</td>
<td>- Tag rules as before.</td>
</tr>
<tr>
<td></td>
<td>- Playing area: 20 by 20 paces (yards).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Designate 2 students to be &quot;It.&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Together they chase the others.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Any student tagged by the pair joins them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- When the &quot;taggers&quot; grow to a group of four they split into two pairs and continue to tag others.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Last student tagged chooses a partner to start the next game.</td>
<td></td>
</tr>
</tbody>
</table>

**Blob Tag**

- As above, except taggers' group grows until the entire group has been tagged.

- Stay together by holding hands.

- Be safe with others.

**EQUIPMENT**

4 cones for boundaries, music or whistle
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON THREE: AEROBIC GAMES  Week: 1  Session: 3

Activity Title (15-minutes): Unit Aerobic Games; Lesson 3 & 4 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Locomotor skills & endurance

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
**UNIT: AEROBIC GAMES**

**OBJECTIVES**
Locomotor skills, serial memory, following directions, endurance

**EQUIPMENT**
4 cones for boundaries, music or whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Low Level)</strong></td>
<td>- Within boundaries, students walk without touching others.</td>
<td>- At a walking pace and without touching others, do various movements to my commands.</td>
</tr>
<tr>
<td><strong>On Command</strong></td>
<td>- Playing area: 20 by 20 paces (yards).</td>
<td>- I will give one command each time. However, you must complete all the previous movements in order before doing the last one.</td>
</tr>
<tr>
<td></td>
<td>- Use music or whistle to stop and start.</td>
<td>- If you forget, watch your classmates for help.</td>
</tr>
<tr>
<td></td>
<td>- On “stop” designate a skill to perform (touch the ground, change direction, turn around, etc.) and then resume walking.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Each time you indicate a new skill, the players must do the previous skills before doing the new one (adding on).</td>
<td></td>
</tr>
<tr>
<td>Example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Walk, touch the ground.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Walk, touch the ground, turn around.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Walk, touch the ground, turn around, jump high, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Work on skills related to current sport unit.</td>
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<tr>
<td></td>
<td>- If students have trouble, simplify the skills.</td>
<td></td>
</tr>
<tr>
<td><strong>On Command</strong></td>
<td>- As above, but jogging.</td>
<td></td>
</tr>
</tbody>
</table>

rev. 7/8/95
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FOUR: AEROBIC GAMES    Week: 2    Session: 4

Activity Title (15-minutes): Unit Aerobic Games; Lesson 5 & 6 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills   (Motor): Locomotor skills & cardiovascular endurance

   (Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
**UNIT: AEROBIC GAMES**

**LESSONS: 5 & 6**

**OBJECTIVES**
- Locomotor skills, exercise physiology
- Knowledge, cardiovascular endurance

**EQUIPMENT**
- 4 cones for boundaries, 3 scarves or pinnies to designate "It."
- Music or whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Alert</td>
<td>Scattered within boundaries, 20 by 20 yards.</td>
<td>5 risk factors are associated with heart disease. They are:</td>
</tr>
<tr>
<td></td>
<td>- Briefly identify cardiovascular risk factors.</td>
<td>1) Physical inactivity</td>
</tr>
<tr>
<td></td>
<td>- Designate 3 players to be &quot;It.&quot; and have them put on pinnies.</td>
<td>2) Smoking</td>
</tr>
<tr>
<td></td>
<td>- When tagged, players jog in place with hands on their heart, saying &quot;Heart Attack&quot; to signal others to come and save them.</td>
<td>3) Poor nutrition</td>
</tr>
<tr>
<td></td>
<td>- They are saved when another player exercises with them, (e.g., performs three situps/jumping jacks, etc. with them).</td>
<td>4) Stress</td>
</tr>
<tr>
<td></td>
<td>- After two minutes, change &quot;Its.&quot;</td>
<td>5) Over-fatness</td>
</tr>
<tr>
<td></td>
<td>- The idea is that physical inactivity is a risk factor for heart disease and exercise helps prevent a heart attack.</td>
<td>In this game, each time you are tagged you gain a risk factor. In order to be &quot;saved,&quot; someone has to exercise with you. I will tell you the exercise to do.</td>
</tr>
<tr>
<td></td>
<td>- Note: Name each tagger after a &quot;risk factor.&quot; One can be a cigarette and hold a baton in her/his hand; another can be a couch potato and carry a potato, etc.</td>
<td>If you are tagged twice, you have two risk factors, and so on. Try not to have all the risk factors of heart disease!</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taggers may not tag others while they are exercising to be saved.</td>
</tr>
</tbody>
</table>
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FIVE: AEROBIC GAMES  

Activity Title (15-minutes): Unit Aerobic Games; Lesson 7 & 8 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Running, grasping & cooperative behavior

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
The students write down each sight vocabulary word used during the lesson.
The students write down the definition for each sight vocabulary word used during the lesson.
The students use each sight vocabulary word used during the lesson in a sentence.
The students write down their reflections and any questions that they have about the lesson.
# UNIT: AEROBIC GAMES

## OBJECTIVES
Running, grasping, cooperative behavior

## EQUIPMENT
4 cones for boundaries, 4 hoops, 20 bean bags or small balls, music, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearty Hoopla</td>
<td>- Arrange four hoops in the corners of a 20 yd. by 20 yd area.</td>
<td>- The object is to collect bean bags from other hoops and return them to your home base.</td>
</tr>
<tr>
<td></td>
<td>- Place 5 bean bags in each hoop.</td>
<td>- Pick one bean bag at a time.</td>
</tr>
<tr>
<td></td>
<td>- Divide class into 4 groups, one behind each hoop.</td>
<td>- Place (no throwing or tossing) it in your own hoop.</td>
</tr>
<tr>
<td></td>
<td>- A player can take only one bean bag at a time.</td>
<td>- You cannot defend your hoop.</td>
</tr>
<tr>
<td></td>
<td>- The team with the most bean bags is the winner.</td>
<td>- Avoid running into others.</td>
</tr>
<tr>
<td></td>
<td>- Play short games.</td>
<td>- Freeze on the signal and count the bean bags in your hoop.</td>
</tr>
<tr>
<td></td>
<td>- Start with students walking if they did not previously warm-up.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- As fitness improves, increase distance between hoops.</td>
<td></td>
</tr>
</tbody>
</table>
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON SIX: AEROBIC GAMES 

Activity Title (15-minutes): Unit Aerobic Games; Lesson 9 & 10 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Locomotor movements, fleeing, tagging & memory skills

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
**UNIT: AEROBIC GAMES**

| LESSONS: 9 & 10 |

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotor movements, tagging, fleeing, memory skills</td>
<td>Bean bag, or small cone, music or whistle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulation</td>
<td>- Students in one large circle, with a bean bag (or small cone) in the middle.</td>
<td>- On signal, all walk (jog, skip) in the direction I call.</td>
</tr>
<tr>
<td></td>
<td>- Divide the class into two teams.</td>
<td>- When I call out a number, the two players with the number try to take the bean bag from the middle of the circle to the perimeter.</td>
</tr>
<tr>
<td></td>
<td>- Each team counts off so each student has a number (e.g., 1-15 for Team A and 1-15 for Team B).</td>
<td>- All others continue to move around the circle.</td>
</tr>
<tr>
<td></td>
<td>- After each point, change the locomotor skill and direction of the movement.</td>
<td>- 2 points are awarded for getting the object back to the team without being tagged.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Only 1 point is awarded to the team if the person is tagged by the opposing number before getting the object back to the circle.</td>
</tr>
</tbody>
</table>

**rev 7/8/95**
BASKETBALL
UNIT
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON ONE: BASKETBALL  Week: 3  Session: 7

Activity Title (15-minutes): Unit Basketball; Lesson 1 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Dribbling, ready position & ball handling

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, Dribbling, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
UNIT: BASKETBALL

OBJECTIVES
Ready position, ball handling, dribbling

LESSON: 1

EQUIPMENT
1 ball/student (basketballs, utility balls; foam balls may provide a greater degree of safety for ball handling drills), whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready Position</td>
<td>-Scattered or on a line</td>
<td>-Stop immediately on signal (whistle).</td>
</tr>
<tr>
<td></td>
<td>-Each student gets a ball after your explanation.</td>
<td>Ready position:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Hold ball with both hands in front of chest, elbows out, feet shoulder width apart, knees bent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-It is from this position that many basketball moves are made.</td>
</tr>
<tr>
<td></td>
<td>-Give students tasks (e.g., dribble, move ball around head) to do and on your signal (whistle) have them return to the ready position.</td>
<td>-Watch me and listen for my directions.</td>
</tr>
</tbody>
</table>

Ball Handling Drills

-As above. -Keep head up, don't look at the ball!

-Change commands every 15 seconds. -Control ball with pads of fingers, not palms.

Sample directions: move the ball:
-around your head
-around your neck
-around your waist
-around your knees
-on the floor around your feet
-in a figure 8 around your ankles
-in a figure 8 around your knees

-Follow my directions and return to ready position on signal.
**UNIT: BASKETBALL**

**LESSON: 1 (Continued)**

### Pivoting
- As above.
- Explain why a pivot is used and show how it is done.
- Call out directions for students to pivot, such as:
  - Ready position!
  - "Glue" your left foot to the ground, step forward and backward with your right foot.
  - Glue your right foot to the ground, step forward and backward with your left foot.
  - A pivot is used to keep the ball from the defense.
  - Take quick, short steps with your free foot.
  - Keep head up and elbows out.
  - Dribble in free space, stop in ready position when the whistle blows.
  - Listen for my command to pivot on either foot.

### Free Dribbling
- As above.
- Spread fingers.
- Students walk and dribble in free space paying attention to their OWN ball.
- Use pads of fingers to PUSH ball down with one hand. Do not slap. Dribble low, below waist level.
- Encourage them to look for open space to avoid crowding.
- Bend knees slightly but keep your back straight.
- Stop students several times to give specific feedback on their skills.
- Look ahead, not at the ball.
- On signal (whistle) return to "Ready Position."

### On Command
- As above.
- Change direction on my hand signals.
- Students dribble, changing direction with your commands.
- Watch me, not the ball.
- Point right, left, forward, and backward.
- Mix up directions.

*rev. 7/7/95*
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON TWO: BASKETBALL  Week: 3  Session: 8

Activity Title (15-minutes): Unit Basketball; Lesson 2 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Dribbling

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, Dribbling, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
## UNIT: BASKETBALL

### LESSON: 2

#### OBJECTIVES
- Dribbling

#### EQUIPMENT
- 1 ball/student, whistle or music

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-up/Review:</td>
<td>- <strong>INDIVIDUAL DAY</strong> -</td>
<td></td>
</tr>
<tr>
<td>Free Dribbling</td>
<td>- Scattered within boundaries, each with a ball.</td>
<td>- Head up! Keep the ball low! Bend those knees!</td>
</tr>
<tr>
<td></td>
<td>- Students walk/jog freely while dribbling and changing hands.</td>
<td>- On signal, (whistle) return to &quot;Ready Position.&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line Dribbling</td>
<td>- While dribbling, students walk/jog on lines on the court. (Use basketball court, four-square, or other lines.)</td>
<td>- Stay on the lines.</td>
</tr>
<tr>
<td></td>
<td>- Students solve their own &quot;traffic&quot; problems by turning around, waiting for the next person, etc.</td>
<td>- No cutting corners.</td>
</tr>
<tr>
<td></td>
<td>- If traffic is a problem, use two separate court lines.</td>
<td>- No passing.</td>
</tr>
<tr>
<td>Dribble Keep Away</td>
<td>- Scattered in boundaries.</td>
<td>- The object of this game is to dribble continuously.</td>
</tr>
<tr>
<td><strong>Option:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- If students lose their ball, have them dribble once around the outside of the area before returning to the game.</td>
<td>- With your free hand try to knock away the basketballs of others.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If you lose your ball, run after it and dribble again.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- You may knock balls away only while you are dribbling.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Keep your body between your ball and your opponents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Dribble low.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Keep your head up.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Move to open space.</td>
</tr>
</tbody>
</table>

*rev. 7/7/95*
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON THREE: BASKETBALL  

Week: 3  
Session: 9

Activity Title (15-minutes): Unit Basketball; Lesson 3 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Passing & catching

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
DOCUMENTS CAPTURED AS RECEIVED
**UNIT:** BASKETBALL  

**OBJECTIVES**  
Passing, catching

**EQUIPMENT**  
1 ball/2 students, whistle or music. You may wish to use foam balls for this lesson to provide a greater degree of safety

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Pass</td>
<td>- Partner face off formation, each pair with a ball.</td>
<td>- Use the chest pass when your teammate is less than 15 feet away.</td>
</tr>
<tr>
<td></td>
<td>- Pass ball back and forth using chest pass.</td>
<td>- Spread fingers, hands on the sides of the ball, elbows out, ball in the middle of your chest.</td>
</tr>
<tr>
<td></td>
<td>- Stop students often and give specific feedback on their skills.</td>
<td>- Step into pass (toward partner) extend arms, turn (pronate) wrists outward, thumbs down.</td>
</tr>
<tr>
<td></td>
<td><strong>Options:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Add a pivot before passing.</td>
<td>- To receive a pass, call for it by extending your arms in front of you.</td>
</tr>
<tr>
<td></td>
<td>- Add a fake before passing.</td>
<td></td>
</tr>
<tr>
<td>Bounce Pass</td>
<td>- As above, using the bounce pass.</td>
<td>- The bounce pass is used to get around defenders who are in front of you.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Just like the chest pass, except ball bounces once before reaching target.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Extend arms downward and bounce ball a little more than 1/2 way to partner/target.</td>
</tr>
</tbody>
</table>
## UNIT: BASKETBALL

### LESSON: 3 Continued

<table>
<thead>
<tr>
<th><strong>ACTIVITY</strong></th>
<th><strong>ORGANIZATION</strong></th>
<th><strong>TEACHING CUES</strong></th>
</tr>
</thead>
</table>
| **Overhead Pass**  
(2 hand) | - As before, using overhead pass. | - Use this pass to go over defenders and to pass the ball a long distance. |
| | | - Similar to a "throw-in" in soccer. |
| | | - Bring ball over and behind head but be careful not to drop it down too far, it could get stolen! |
| | | - Step towards target, extend arms and wrists, release ball while hands are high and just in front of head. |
| **Passing Challenges** | - As above. | - After each challenge, get in ready position and wait for directions. |
| | - Present challenges. | **Challenges:** |
| | - Students stop passing and hold ball in ready position when each challenge is finished. | - How many chest/bounce/overhead passes can you and your partner make in 15 seconds? |
| | | - How quickly can you make 10 chest/bounce/overhead passes? |
| | | - Can you use chest passes while your partner uses bounce passes? (Switch passes for partners.) |
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FOUR: BASKETBALL  Week: 4  Session: 10

Activity Title (15-minutes): Unit Basketball; Lesson 4 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Shooting

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
## UNIT: BASKETBALL

### LESSON: 4

#### OBJECTIVES

**Shooting**

#### EQUIPMENT

1 ball/student, whistle

#### ACTIVITY

**One-Handed Shot**

- Individuals on a line, or scattered within boundaries, **without a ball**.
- Describe and demonstrate shot; students "shadow" technique.
- When instructing shooting components, begin with the lower body and move up.

**Shadow (without ball)**

- Face target (hoop).
- Point toes toward target, feet about shoulder width apart, knees bent, foot on shooting side slightly ahead of the other.
- Rest ball (a book) on dominant hand (a table), with elbow bent.
- Non-dominant hand is on side of ball (a bookend) with little or no pressure on ball.
- Look over the top of the ball to see the rim/target.
- Extend legs, bring ball up, point shooting elbow to the rim/target, release above, in front, and slightly to side of head.
- Upon release, straighten shooting arm, "snap" shooting wrist. Fingers on non-dominant hand should be pointing straight up.
- Hold your "finish" (follow-through).

**Shooting Practice (with ball)**

- Students shoot at a basket or to a wall (3/4 per basket, each with a ball).
- Circulate to help as needed.
- Practice at a basket; begin 5 feet away.
- Work on your form. At this point, technique is more important than accuracy.

**Layups**

- Have students dribble to their baskets at a 45 degree angle, stop, and shoot a "power" (2 foot takeoff) layup.
- Dribble from the free throw line to your basket and shoot "power" layups alternating sides of the basket.
- Stop and pick up your dribble a few feet in front of the backboard.
- Shoot the ball so it bounces off the backboard into the basket.
- Get your own rebound. Dribble back to "free throw line extended," (45 degrees) turn and face the other side of the basket, dribble into position to shoot.

#### ORGANIZATION

**-INDIVIDUAL DAY-**

**-Individual Day-**

- Face target (hoop).
- Point toes toward target, feet about shoulder width apart, knees bent, foot on shooting side slightly ahead of the other.
- Rest ball (a book) on dominant hand (a table), with elbow bent.
- Non-dominant hand is on side of ball (a bookend) with little or no pressure on ball.
- Look over the top of the ball to see the rim/target.
- Extend legs, bring ball up, point shooting elbow to the rim/target, release above, in front, and slightly to side of head.
- Upon release, straighten shooting arm, "snap" shooting wrist. Fingers on non-dominant hand should be pointing straight up.
- Hold your "finish" (follow-through).

**-Individual Day-**

- Face target (hoop).
- Point toes toward target, feet about shoulder width apart, knees bent, foot on shooting side slightly ahead of the other.
- Rest ball (a book) on dominant hand (a table), with elbow bent.
- Non-dominant hand is on side of ball (a bookend) with little or no pressure on ball.
- Look over the top of the ball to see the rim/target.
- Extend legs, bring ball up, point shooting elbow to the rim/target, release above, in front, and slightly to side of head.
- Upon release, straighten shooting arm, "snap" shooting wrist. Fingers on non-dominant hand should be pointing straight up.
- Hold your "finish" (follow-through).

**-Individual Day-**

- Face target (hoop).
- Point toes toward target, feet about shoulder width apart, knees bent, foot on shooting side slightly ahead of the other.
- Rest ball (a book) on dominant hand (a table), with elbow bent.
- Non-dominant hand is on side of ball (a bookend) with little or no pressure on ball.
- Look over the top of the ball to see the rim/target.
- Extend legs, bring ball up, point shooting elbow to the rim/target, release above, in front, and slightly to side of head.
- Upon release, straighten shooting arm, "snap" shooting wrist. Fingers on non-dominant hand should be pointing straight up.
- Hold your "finish" (follow-through).
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FIVE: BASKETBALL  Week: 4  Session: 11

Activity Title (15-minutes): Unit Basketball; Lesson 5 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Passing, shooting, rebounding & receiving

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
## UNIT: BASKETBALL

### OBJECTIVES
Passing, receiving, shooting, rebounding

### EQUIPMENT
1 ball/2 students, whistle or music

### ACTIVITY

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
</table>
| **Warm-up/Review:**  
**Chest, Bounce, and Overhead Passes**  
- Partners face off formation, each pair with a ball.  
- Pass ball back and forth using chest or bounce pass.  
- Give specific feedback on skills.  
- Have partners back up as they become successful.  
- Between each pass add something challenging. | Between each pass:  
1) Take ball once around your waist.  
2) Take ball once around your knees.  
3) Dribble ball with specific hand (right or left) 5 times before passing.  
4) Dribble ball alternating hands 5 times before passing. |

| **Passing Challenges**  
- As above.  
- Present challenges.  
- Students should stop passing and hold ball in ready position when each challenge is finished. | **Challenges:**  
- How many chest/bounce/overhead passes can you and your partner make in 10 (15) seconds?  
- How quickly can you make 10 (your choice) passes?  
- Can you use overhead passes while your partner uses bounce passes? (Switch passes for partners.) |

| **Pass and Shoot**  
- 2-3 sets of partners at a basket, each with 1 ball.  
- Pairs alternate shooting at the basket after receiving a pass.  
- Encourage students to release the ball with one hand | **Stay close to the basket.**  
- After you receive a pass, shoot without dribbling.  
- If you make 2 shots in a row, you may take a step back. |

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rev. 7/7/95
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON SIX: BASKETBALL    Week: 4   Session: 12

Activity Title (15-minutes): Unit Basketball; Lesson 6 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Passing & receiving

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: BASKETBALL

OBJECTIVES
Passing, receiving

EQUIPMENT
1 ball/5 students, whistle. You may wish to provide foam balls for this lesson to provide a greater degree of safety.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass and Follow</td>
<td>- Groups of 4-5 in two file lines facing each other about 10 feet apart.</td>
<td>- Pass before you run.</td>
</tr>
<tr>
<td></td>
<td>- First person in one line passes to first person in other line using specified pass.</td>
<td>- Run to the end of the opposite line to keep drill going quickly.</td>
</tr>
<tr>
<td></td>
<td>- After passing the passer runs (to the right) to the end of the line they pass to and waits for next turn.</td>
<td>- Stay to your right when you run.</td>
</tr>
<tr>
<td></td>
<td>- Specify type of pass (chest, bounce, overhead, underhand). Have one group demonstrate.</td>
<td>- Keep the lines about 10 feet apart.</td>
</tr>
</tbody>
</table>

Challenges:
- How quickly can your group complete one cycle of the drill (everyone in original place)?
- Can your group complete one cycle without missing a pass?

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SOCCER
UNIT
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

• Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

• Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON ONE: SOCCER

Activity Title (15-minutes): Unit Soccer; Lesson 1 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Dribbling & trapping

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: SOCCER

LESSON: 1

OBJECTIVES
Dribbling, trapping

EQUIPMENT
1 ball/each student, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cue Practice</td>
<td>Individuals scattered in open space, each with a ball.</td>
<td>1 whistle = Trap ball, freeze, and listen.</td>
</tr>
<tr>
<td></td>
<td>Have students practice quick responses to whistle cues.</td>
<td>2 whistles = Pick up ball and jog to me.</td>
</tr>
<tr>
<td></td>
<td>Students trap with bottom of the foot. (Explain/demo.)</td>
<td>Use the bottom of your foot to secure the ball.</td>
</tr>
<tr>
<td></td>
<td>Praise those responding quickly to cues.</td>
<td>Who can get here in 5 seconds when I blow the whistle twice?</td>
</tr>
<tr>
<td>Walk and Dribble</td>
<td>Students walk freely while dribbling.</td>
<td>Keep ball 1-3' away.</td>
</tr>
<tr>
<td></td>
<td>Trap on teacher command (3-4 times).</td>
<td>Keep head up and watch for others.</td>
</tr>
<tr>
<td></td>
<td>Stress the importance of controlling the ball.</td>
<td>Pay attention to your OWN ball.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Keep the ball on the ground by pointing toes down and using the inside of the big toe for control.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trap ball with instep (give with the ball) on the whistle or when music stops.</td>
</tr>
<tr>
<td>Jog and Dribble</td>
<td>As above.</td>
<td>Do the above activities, but at a jogging pace.</td>
</tr>
<tr>
<td></td>
<td>Jogging.</td>
<td></td>
</tr>
<tr>
<td>On Command</td>
<td>Scattered, each student with a ball.</td>
<td>Walk/jog and dribble in free space; change directions on my command.</td>
</tr>
<tr>
<td></td>
<td>Commands can be verbal (include right/left foot, direction, trapping, etc.) or visual (point to a certain direction).</td>
<td></td>
</tr>
</tbody>
</table>

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SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON TWO: SOCCER

Activity Title (15-minutes): Unit Soccer; Lesson 2 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Passing, dribbling & trapping

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
**UNIT:** SOCCER

**OBJECTIVES**
Passing, dribbling, trapping

**LESSON:** 2

**EQUIPMENT**
1 ball/2 students, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pass and Trap</strong></td>
<td><strong>PARTNER DAY</strong></td>
<td>-Trap (receive) and control ball before passing.</td>
</tr>
<tr>
<td>(receive)</td>
<td>Students face off, on lines, approx. 15 feet apart.</td>
<td>-Point your toes down, contact the ball with your &quot;instep&quot; to pass.</td>
</tr>
<tr>
<td></td>
<td>-Students kick back and forth with partners using different passes and traps.</td>
<td>-Change passes: Toe punch, outside foot, opposite foot.</td>
</tr>
<tr>
<td></td>
<td>-Change passes and traps every 2 minutes.</td>
<td>-Change traps: instep, bottom foot, both feet, leg, body.</td>
</tr>
</tbody>
</table>

**Challenges**
-Teacher presents challenges.

- "How many passes can you and your partner make in 15 seconds?"

- "Remember your score. Let's do it again and see how many people can improve!"

- "How quickly can you make 15 passes?" (sit or raise hand when finished)

- "Let's try it again, see if you can do it even faster this time!"

**Passing on the Move**
(Pass-Pass)
-Partners move into open space and pass back and forth while running.

-As partners become successful, allow them to spread further apart.

-Jog side by side and pass back and forth with your partner. (Stay close.)

-Pass the ball ahead of your partner.

-Trap the ball on the move.

-Which passes work best when you are on the move?
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Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON THREE: SOCCER

Activity Title (15-minutes): Unit Soccer; Lesson 3 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Defending, passing, shooting & trapping

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEETING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: SOCCER

LESSON: 3

OBJECTIVES
Dribbling, trapping, passing, defending, shooting

EQUIPMENT
1 ball/each student, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Warm-Up:</strong></td>
<td><strong>PARTNER DAY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Shadow Dribble</strong></td>
<td>- Pairs, each student with their own ball.</td>
<td>- The leader dribbles freely while partner shadows by following about 2 yards behind.</td>
</tr>
<tr>
<td></td>
<td>- Change leader and follower every 30 seconds.</td>
<td>- &quot;Shadow&quot; must do what the leader does.</td>
</tr>
<tr>
<td></td>
<td>- Encourage and praise creativity.</td>
<td>- Cut right; stop; dribble backwards. What can you think of doing with the ball?</td>
</tr>
</tbody>
</table>

| **Soccer Marbles**|                                                                              |                                                                              |
|                   | - As above. | - The object of the game is to kick your ball into your partner's ball. |
|                   | - Student tries to hit partner's ball with their ball. | - Partner "A" moves away from their ball. "B" controls own ball 8 paces away. B attempts to instep kick ball into A's. |
|                   | - Score 1 point for each hit, but de-emphasize points. | - Score 1 point for each hit. |
|                   | - In time, back partners up to increase challenge. | - Switch roles every 5 kicks. |
|                   | - Moving Marbles adds motion and defense. | **Variation:** "Moving Marbles" |
|                   | | - Try to prevent your partner's ball from hitting yours by keeping yours moving. |
|                   | | - Move anywhere within the boundaries. |

| **Dribble Keep Away** | 1 ball per pair. | **Partner A**: Has ball and dribbles to keep it away from Partner B. |
|                      | - Blow whistle every 30 seconds to change dribblers. | **Partner B**: Attempts to "legally" obtain possession of the ball from Partner A. |
|                      | | - Pushing, shoving, tripping, and slide tackling are not allowed. |
|                      | | - Stay inside the boundaries. |

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Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FOUR: SOCCER  
Week: 6  Session: 16

Activity Title (15-minutes): Unit Soccer; Lesson 4 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Defending, passing & trapping

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
**UNIT:** SOCCER

**LESSON:** 4

### OBJECTIVES
- Passing, trapping, defending, feinting

### EQUIPMENT
- 1 ball/3 students, 4 cones for boundaries, whistle or music

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Warm-Up and review:</td>
<td>-GROUP DAY-</td>
<td>-Pass the ball within your group.</td>
</tr>
<tr>
<td>Triangle Pass and Trap</td>
<td>-Groups of 2 in a triangle, 1 ball per group.</td>
<td>-Trap and control ball before passing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Practice different passes and traps.</td>
</tr>
</tbody>
</table>

**Keep Away**
(2 on 1)

- **Keep away formation.**
- Two students pass to each other while the defender tries to intercept.
- Change defender every minute to ensure equal opportunity.
- Receivers:
  - Move into open space to receive a pass.
- Passers:
  - Pass quickly. Use fakes and feints.
  - Dribble to get into a good passing position.
- Defender:
  - Move into the middle to intercept the ball.
Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FIVE: SOCCER

Activity Title (15-minutes): Unit Soccer; Lesson 5 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Dribbling & game play

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: SOCCER

OBJECTIVES
Dribbling, game play

EQUIPMENT
1 ball/each student, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get Your Ball</td>
<td>- Divide class into two teams (by separating partner's) one on each end line.</td>
<td>The object of the game is to score a point by getting a ball and dribbling it back to your line.</td>
</tr>
<tr>
<td></td>
<td>- Balls are placed on the center line.</td>
<td>- On command, all run to mid-field, try to secure a ball, and dribble it back to your starting line.</td>
</tr>
<tr>
<td></td>
<td>- Start with 2-4 fewer balls than there are players.</td>
<td>- Players without a ball attempt to &quot;legally&quot; gain control of one.</td>
</tr>
<tr>
<td></td>
<td>- De-emphasize points.</td>
<td>- Students who push or violate other rules must return to the starting line, and wait for their next turn.</td>
</tr>
<tr>
<td></td>
<td>- After each round, take away 1-2 more balls.</td>
<td>- Return balls to the mid-line on command.</td>
</tr>
</tbody>
</table>

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**Pre-Activity (15-minutes)**

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

**LESSON SIX: SOCCER**

Activity Title (15-minutes): Unit Soccer; Lesson 6 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Passing, trapping & throw-in's

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

**Post-Activity (10-minutes):** JOURNAL WRITING (Reflection, Questioning and Probing)

- Have students write down each sight vocabulary word used during the lesson.
- Have students write down the definition for each sight vocabulary word used during the lesson.
- Have students use each sight vocabulary word used during the lesson in a sentence.
- Have students write down their reflections and any questions that they have about the lesson.
### OBJECTIVES
Passing, trapping, throw-in's

### EQUIPMENT
1 ball/2 students, 11 cones, whistle

### ACTIVITY
**Give and Go**

- **PARTNER DAY**
- Scattered in pairs, 1 ball/pair.
- Partners begin side by side about 10 feet apart.
- Give and go teaches passing to a moving target.
- "A" is stationary with ball. B runs into open space ahead and in front of A. A passes ball to B ("leading" them).
- Partner "A" runs out for short pass.
- A *gives,* then *go's.* A moves ahead and in front of B to receive next pass.
- Partner "B" passes to "A" who traps and stops.
- Repeat until both have advanced downfield.
- Partner with ball is stationary.
- Remember, partner without ball moves into open space.
- "B" then runs ahead of "A" to receive the next pass.
- Use the instep pass first, then you may vary your passes.

### ORGANIZATION

### TEACHING CUES
- Partners begin side by side about 10 feet apart.
- Give and go teaches passing to a moving target.
- "A" is stationary with ball. B runs into open space ahead and in front of A. A passes ball to B ("leading" them).
- Partner "A" runs out for short pass.
- A *gives,* then *go's.* A moves ahead and in front of B to receive next pass.
- Partner "B" passes to "A" who traps and stops.
- Repeat until both have advanced downfield.
- Remember, partner with ball is stationary, partner without ball moves into open space.
- "B" then runs ahead of "A" to receive the next pass.
- Use the instep pass first, then you may vary your passes.

### Sideline Throw-in

- Pairs; 1 ball per pair.
- A throw-in occurs when the entire soccer ball goes out of bounds beyond the sideline.

- Students practice "throw-ins" back and forth with partner.
- To perform a legal throw-in you must:
  1. Face where you are going to throw.
  2. Hold ball with both hands, bring it directly over head.
  3. Keep both feet on the ground.
  4. Begin with ball behind head, step towards target, release ball above head, drag back foot (do not lift.)

**rev. 6/22/94**
FRISBEE
UNIT
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON ONE: FRISBEE     Week: 7     Session: 19

Activity Title (15-minutes): Unit Frisbee; Lesson 1 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills     (Motor): Throwing & catching

(Literacy): SIGHT WORD VOCABULARY.

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: FRISBEE

OBJECTIVES
Throwing, catching

EQUIPMENT
1 frisbee/pair, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhand Grip</td>
<td>-Partners face off formation</td>
<td>-Hold with thumb on top, index finger just under the rim, middle finger extended toward center, fourth and little finger curled back against the rim.</td>
</tr>
<tr>
<td></td>
<td>-Instruct and demo.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Students try grip, toss to partner.</td>
<td>-Grip firmly.</td>
</tr>
<tr>
<td>Backhand Throw</td>
<td>-As above.</td>
<td>-Hold frisbee close to body, frisbee touching inside of the forearm, with side and back of hand facing target.</td>
</tr>
<tr>
<td></td>
<td>-Demonstrate.</td>
<td>-Step toward target with front foot, snap wrist and extend arm.</td>
</tr>
<tr>
<td></td>
<td>-With partner, toss back and forth.</td>
<td>-Keep frisbee low and parallel to ground.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Bend knees.</td>
</tr>
<tr>
<td>Two-Hand Catch</td>
<td>-As above.</td>
<td>-&quot;Clap&quot; frisbee with one hand on top and one underneath (call &quot;alligator catch&quot; for younger students).</td>
</tr>
<tr>
<td></td>
<td>-Demonstrate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Students toss back and forth with partners.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Vary the throwing distance.</td>
<td></td>
</tr>
<tr>
<td>Challenges</td>
<td>-As above.</td>
<td>Challenges:</td>
</tr>
<tr>
<td></td>
<td>-Provide challenges for specific skills.</td>
<td>-How many catches can you make?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-How many catches can you and your partner make in 10 (15) seconds?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-How quickly can you make 10 passes? (Sit down or raise hand when finished.)</td>
</tr>
<tr>
<td>Frisbee Step Back</td>
<td>-As above.</td>
<td>-Pass back and forth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Begin close together and take a giant step back after each of you make a successful catch.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-If one misses, stay where you are.</td>
</tr>
</tbody>
</table>

rev 7/8/95
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON TWO: FRISBEE  
Week: 7  
Session: 20

Activity Title (15-minutes): Unit Frisbee; Lesson 2 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills  (Motor): Throwing & catching

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
**UNIT:** FRISBEE

**LESSON:** 2

**OBJECTIVES**
Throw and catch

**EQUIPMENT**
1 frisbee/pair, 4 cones, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warm-Up/Review:</strong> Partner Throw and Catch</td>
<td>- <strong>PARTNER DAY:</strong> Partners face off formation. - Throw and catch with partner using backhand throw and 2-hand catch.</td>
<td>- Step toward your partner. - Keep your frisbee parallel to the ground.</td>
</tr>
<tr>
<td><strong>One-Hand Catch (Fingers Up)</strong></td>
<td>- As above.</td>
<td>- Use for catching a frisbee above the waist. - Catch with fingers pointing up and thumb underneath.</td>
</tr>
<tr>
<td><strong>One-Hand Catch (Fingers Down)</strong></td>
<td>- As above.</td>
<td>- Use for catching a frisbee below the waist. - Catch with fingers pointing down and thumb on top.</td>
</tr>
<tr>
<td><strong>Give and Go</strong></td>
<td>- <strong>Scattered in pairs</strong> formation.</td>
<td>- Stand near your partner. - Throw frisbee into open space ahead of your partner so he/she may run and catch it. - Alternate throwing and catching.</td>
</tr>
</tbody>
</table>

**rev. 7/6/95**
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON THREE: FRISBEE

Activity Title (15-minutes): Unit Frisbee; Lesson 3 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Throwing, running, defending & catching

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
**UNIT: FRISBEE**

**OBJECTIVES**
Throwing, catching, running, defending

**EQUIPMENT**
1 frisbee/pair of students, whistle

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<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep Away</td>
<td>-Keep away formation -Groups of 3 scattered within boundaries (one frisbee per group) -Two students pass to each other while the middle one tries to intercept -Rotate &quot;middle&quot; every 30 seconds to provide equal opportunity -Specify passes and catches.</td>
<td>-Play &quot;keep away&quot; from the person in the middle -Receivers: Move into open space; give passer a target -Passers: Pivot to get a clear throw; wait until receiver is open; lead your receiver.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>3 Catch Lead-Up</th>
<th>-Groups of 3 in a triangle scattered on field -Students throw frisbee within groups trying to make three catches in a row.</th>
<th>-Try to make 3 catches in a row, each to a different teammate! -Count each catch out loud. After trials: -Let's play Step Back! -When all 3 have successfully caught the frisbee, everyone in the group takes one step back. How far back can you get in 2 minutes?</th>
</tr>
</thead>
</table>
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FOUR: FRISBEE

Activity Title (15-minutes): Unit Frisbee; Lesson 4 & 5 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Throwing, running, defending & catching

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
### UNIT: FRISBEE

<table>
<thead>
<tr>
<th>LESSONS</th>
<th>4 &amp; 5</th>
</tr>
</thead>
</table>

#### OBJECTIVES
Throwing, catching, running, defending

#### EQUIPMENT
1 frisbee/3 students, 8 cones, 15 pinnies

### ACTIVITY | ORGANIZATION | TEACHING CUES
--- | --- | ---

#### 3 Catch Lead-Up II
(passing to a moving target)

- 2 groups of 3 in an area approx. 30 yds. square. (e.g., class of 30: 10 groups, 5 areas.)

- Students pass frisbee within groups.

- Try to make 3 catches in a row, each to a different person in your group.

- Move to open space within your boundaries.

- Lead your receiver.

**After trials:**
- The person with the frisbee cannot take more than 3 steps before passing it or hold it for more than 3 seconds.

#### 3 Catch Frisbee Game

- As above.

- Same groups of 3 per team.

- Half the teams wear pinnies.

- 5 games are played simultaneously; one frisbee per game.

- If frisbee is dropped or intercepted, the other team takes possession.

- Play 5 per team if advanced.

- The object is to complete 3 consecutive catches without dropping the frisbee or having it intercepted.

- Team with pinnies begins by passing frisbee to teammates.

- If 3 catches are completed, a point is awarded and the other team takes the frisbee.

- If frisbee is intercepted or deflected, other team takes possession at that spot. Whichever team touches the frisbee last gets possession.

- Count your catches out loud.

- A defender may not guard person with frisbee closer than 3 feet.

- Only three steps with the frisbee are allowed.

- Passes must travel at least 3 feet.

- You may only hold the frisbee for 3 seconds.

- Move into open space. Give and go!
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FIVE: FRISBEE

Week: 8  Session: 23

Activity Title (15-minutes): Unit Frisbee; Lesson 6 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Throwing for accuracy & distance

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
### UNIT: FRISBEE

#### OBJECTIVES
Throwing for accuracy, distance

#### EQUIPMENT
- 1 frisbee/student*
- 10-20 hoops
- 4 cones
- Whistle

#### ACTIVITY | ORGANIZATION | TEACHING CUES
--- | --- | ---
**Target Frisbee**  
- Hoops are scattered on playing field.  
- Individuals on a line, each with a frisbee.  
- For safety, all students throw and retrieve simultaneously.  
- De-emphasize points at the end.  
*Can be played with one frisbee per pair, but is not as active.*  
- On "THROW!" students throw frisbee to any hoop.  
- On "GO!" all students RUN to retrieve OWN frisbee and RUN back.  
- 5 points are awarded if entire frisbee remains inside the hoop.  
- 3 points if frisbee remains partially in the hoop.  
- 1 point if the frisbee touches the hoop but does not stop on the hoop.  
- Keep throw low.  
- Keep your own score.

**Throw for Distance**  
- Individuals on a line (with the wind at their back).  
- For safety, all students throw at the same time and retrieve simultaneously.  
- Can be played with one frisbee per pair, but is not as active.  
- On "THROW!" all throw and wait for signal to retrieve.  
- On "GO!" RUN after your own frisbee, count how many paces it takes for you to reach your frisbee, pick it up, and RUN back. Try to improve your distance on each throw.  
- Fly frisbee low if windy.  
- Keep your frisbee level (parallel to the ground).  
- Variation: Have students estimate how many throws it would take them to reach a fence (or object in the distance). On go, they count their throws.
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON SIX: FRISBEE Week: 8 Session: 24

Activity Title (15-minutes): Unit Frisbee; Lesson 11 & 12 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Throwing, catching & game skills

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
**UNIT:** FRISBEE

**OBJECTIVES**
Catching and throwing, game skills

**LESSONS:** 11 & 12

**EQUIPMENT**
1 frisbee/7 students, whistle, 4 bases or cones 10 hoops

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frisbee Baseball</td>
<td><strong>GROUP DAY</strong></td>
<td></td>
</tr>
<tr>
<td>(All-Run)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- It is best to instruct the game the first time with all students playing on one field (baseball diamond).

- When students understand game rules, play with 2 fields, each with 4 bases (or cones).

- 5 hoops per game, scattered in outfield. Increase or decrease the number of hoops depending upon grade and skill level of students.

- 4 teams, 2 per field, 7-8 players each.

- One team at bat, the other in the field.

- Batter counts the # of times runners touch home plate (each player counts as one run).

- Teacher watches to see when fielding team has recorded their "out." Blows whistle to signify.

- Rotate sides when all players on the batting team have had a turn to throw (if playing on two fields).

- Batter throws frisbee into the field.

- Entire batting team runs around the bases in one line (no passing).

- Each player reaching home plate before an "out" scores one run. The person who threw the frisbee will count the runs scored for their team.

- Run until you hear my whistle.

- One person in each hoop; everyone else spread out all over the field.

- If the frisbee is caught in the air, the batter is out.

- If the frisbee is not caught in the air, quickly retrieve it and throw to those standing in each of the five hoops. It can go in any order, it just has to be held by someone with at least one foot in a hoop.

- When frisbee has been thrown to all five hoops, I will blow the whistle. No more runs can be scored once the whistle blows.
VOLLEYBALL
UNIT
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON ONE: VOLLEYBALL  Week: 9  Session: 25

Activity Title (15-minutes): Unit Volleyball; Lesson 1 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Bump

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
**UNIT: VOLLEYBALL**

**OBJECTIVES**

Bump
(Forearm volley/pass)

**LESSON: 1 begins BUMP WEEK**

**EQUIPMENT**

1 foam ball/student, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
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</tr>
</thead>
</table>
| Shadow            | -Students without a ball, scattered within boundaries or on a line. | -Point toes straight ahead, feet shoulder width apart one slightly forward, bend knees, lean forward.  
|                   |                                       | -Stretch arms out in front.  
|                   |                                       | -Lay one hand on top of the other with both palms up. Place your thumbs side by side and point them down.  
|                   |                                       | -Create a flat forearm hitting surface by keeping wrist and elbows straight.  
|                   |                                       | To execute a proper bump:  
|                   |                                       | -Move feet to get your body to the ball.  
|                   |                                       | -Watch ball into flat forearm hitting surface.  
|                   |                                       | -Use legs to bump; only move your arms up into the ball approx. 1 foot.  
| Catch on Forearms | -Each student with a ball, scattered within boundaries or on a line. | -Practice proper positioning and technique by tossing the ball a few feet in the air and "catching" it on your forearms.  
| Toss, Bump, Catch | -As above.                             | -After you are able to "catch" the ball on your forearms 5 times in a row, toss the ball, bump it a few feet in the air, and catch it with your hands.  
|                   |                                       | -See how many times you can toss, bump, catch without the ball hitting the ground.  
| Keep it Up        | -Students begin bumping after they toss, bump, catch 5 times in a row. | -Bump to yourself. (Keep it up)  
|                   |                                       | Challenges:  
|                   |                                       | -"How many times can you bump without the ball hitting the ground?"  
|                   |                                       | -"How many times can you bump in a row?"  
|                   |                                       | -"How many bumps can you do in 15 seconds?"  
|                   |                                       | -"How long does it take you to do 10 bumps?" (5 feet above your head or higher?)  
| Bump to Wall      | -Individuals 5 feet from wall.         | Challenges:  
| (if available)    |                                       | -"Can you bump your ball against a wall?"  
|                   |                                       | -"How many times you can do it in a row?"  

rev. 12/1/95
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

• Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

• Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON TWO: VOLLEYBALL

Activity Title (15-minutes): Unit Volleyball; Lesson 2 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Bump

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
**UNIT**: VOLLEYBALL

**OBJECTIVES**
- Bump

**LESSON**: 2

**EQUIPMENT**
- foam ball/pair, cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Toss to Bump</strong></td>
<td>- Pairs scattered within boundaries.</td>
<td>- Toss the ball (in an underhand motion with a gentle arch) to your partner's forearms.</td>
</tr>
<tr>
<td></td>
<td>- Students alternate tossing and bumping.</td>
<td>- Bump it back to your partner so they do not have to move to catch it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Switch after 5 tosses. Repeat.</td>
</tr>
<tr>
<td><strong>Toss to Move</strong></td>
<td>- As above.</td>
<td>- Partner A: Toss ball about 2 feet to the side.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Partner B: Move feet to get in front of ball, bump back to partner. (Switch after 5.)</td>
</tr>
<tr>
<td><strong>Keep it Up</strong></td>
<td>- As above.</td>
<td>- Bump with your partner. (Keep it up)</td>
</tr>
<tr>
<td></td>
<td>- Students bump back and forth with their partners.</td>
<td>Challenges:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- &quot;How many times can you (and your partner) bump without letting the ball hit the ground?&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- &quot;How many bumps can you do in 15 seconds?&quot;</td>
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<td></td>
<td></td>
<td>- &quot;How long does it take you to do 15 bumps?&quot;</td>
</tr>
<tr>
<td><strong>Bump to Wall</strong></td>
<td>- Pairs 5 feet from wall.</td>
<td>- Alternate bumps against the wall with your partner.</td>
</tr>
<tr>
<td>(if available)</td>
<td>- Spread students so each pair has 10' of wall space.</td>
<td>- Repeat challenges above.</td>
</tr>
<tr>
<td><strong>B.U.M.P. Game</strong></td>
<td>- As above</td>
<td>- Alternate bumping against the wall.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Player winning the rally earns the letters B.U.M.P. in sequence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The first player to spell &quot;B.U.M.P.&quot; wins.</td>
</tr>
</tbody>
</table>

rev. 12/1/95
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON THREE: VOLLEYBALL

Week: 9 Session: 27

Activity Title (15-minutes): Unit Volleyball; Lesson 3 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Bump

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: VOLLEYBALL

LESSON: 3

EQUIPMENT
1 foam ball/4 students, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep it Up</td>
<td>-Circles of 4, scattered within boundaries.</td>
<td>-Bump in your groups. (Keep it up)</td>
</tr>
<tr>
<td></td>
<td>-Encourage students to call for the ball.</td>
<td>Challenges:</td>
</tr>
<tr>
<td></td>
<td>-Have group leaders count the number of consecutive bumps.</td>
<td>-&quot;Which group can keep the ball from hitting the ground the longest?&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-&quot;Which group can pass the most bumps in 20 seconds?&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-&quot;How long will it take your group to hit 20 bumps?&quot;</td>
</tr>
</tbody>
</table>

Keep it Up - Run Around (for highly skilled)

-Each group forms 2 single file lines of 2 facing each other.

-Begin by tossing ball underhanded to opposite line.

-First person in line bumps the ball back.

-After bumping, run to the back of the opposite line.

-Run to the right to avoid collisions.

-Call "I got it!" when it is your turn.

Challenges:

-"How many times can your group bump without letting the ball hit the ground?"

-"How many bumps can your group hit in one minute?"
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FOUR: VOLLEYBALL       Week:  10       Session:  28

Activity Title (15-minutes): Unit Volleyball; Lesson 4 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Set

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
## OBJECTIVES

**Set** (Overhead volley/pass)

## EQUIPMENT

- One foam ball/student
- 4 cones for boundaries
- Whistle

## ACTIVITY | ORGANIZATION | TEACHING CUES
--- | --- | ---
**Shadow** | - Students *without a ball*, scattered within boundaries or on a line. - Students "shadow" (practice without a ball) correct form and technique. | - Set position:
- Point toes straight ahead, feet shoulder width apart, bend knees, lean forward.
- Arms overhead, point elbows out.
- Form a diamond using thumbs and index fingers.
- Make a window with your hands and thumbs to see the ball coming from above.
- Spread and relax other fingers.
- Use the pads of your fingers, not the tips.

To execute a proper set:
- Contact the ball near your forehead.
- Watch the ball into your fingers, allow them to "give" on contact, extend your legs, extend your elbows and wrists, push out and up with your fingers.

**Catch On Fingers** | - Each student *with a ball*, scattered within boundaries, or on a line. | - Practice proper positioning and technique by tossing the ball a few feet in the air and "catching" it on your fingers in front of forehead.

**Toss, Set, Catch** | - As above. | - "After you are able to "catch" the ball on your fingers 5 times in a row, toss the ball, set it a few feet in the air, and catch it near your forehead."
- "See how many times you can toss, set, catch, without the ball hitting the ground."

**Keep it Up** | - Students begin setting after they toss, set, catch 5 times in a row. | - Set to yourself. (Keep it up)

### Challenges:
- "How many times can you set it in a row?"
- "Who can set the ball 5 times in a row?"
- "How many sets can you do in 15 seconds?"
- "How long does it take you to do 10 sets?"

**Set to Wall** (if available) | - Individuals 5 feet from wall. | Challenges:
- "Can you set your ball against a wall?"
- "How many times can you set it in a row?"
SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

- Warm-up activities – (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON FIVE: VOLLEYBALL

Activity Title (15-minutes): Unit Volleyball; Lesson 5 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Set

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
**UNIT:** VOLLEYBALL

**OBJECTIVES**

| Set |

**EQUIPMENT**

1 foam ball/pair, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toss to Partner</strong></td>
<td>Partners scattered within boundaries.</td>
<td>- Toss the ball (in an underhand motion with a gentle arch) to your partner’s hands near forehead.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Set it back to your partner so they do not have to move to catch it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Switch after 5 tosses. Repeat.</td>
</tr>
<tr>
<td><strong>Toss to Move</strong></td>
<td>As above.</td>
<td>- Partner A: Toss ball about 2 feet to the side.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Partner B: Move feet to get front of ball, set back to partner.</td>
</tr>
<tr>
<td><strong>Keep it Up</strong></td>
<td>As above.</td>
<td>- Set with your partner. (Keep it up)</td>
</tr>
<tr>
<td></td>
<td>Students set back and forth with their partners.</td>
<td>Challenges:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;How many times can you (and your partner) set without letting the ball hit the ground?&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;How many sets can you do in 20 seconds?&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;How long does it take you to do 15 sets?&quot; (5 feet above your head or higher)</td>
</tr>
<tr>
<td><strong>Set to Wall</strong></td>
<td>Pairs 5 feet from wall.</td>
<td>- Alternate setting against the wall with your partner.</td>
</tr>
<tr>
<td>(if available)</td>
<td>Spread students so each pair has 10' of wall space.</td>
<td>- Repeat challenges above.</td>
</tr>
<tr>
<td><strong>S.E.T. Game</strong></td>
<td>As above.</td>
<td>- Alternate setting against the wall.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Player winning a rally earns the letters S.E.T. in sequence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The first player to spell &quot;S.E.T.&quot; wins.</td>
</tr>
</tbody>
</table>

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SPARK Augmented with LITERACY Lesson Template

Pre-Activity (15-minutes)

• Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (10-minutes)

• Warm-up activities - (1) Jumping jacks, (2) mountain climbers, (3) jog in place, (4) curl-ups, (5) push-ups and (6) forward lunge. 20-second stations with 15-second rest period. (See explanation provided). (5-minutes)

LESSON SIX: VOLLEYBALL

Activity Title (15-minutes): Unit Volleyball; Lesson 6 from SPARK (see SPARK attachment)

Equipment: see SPARK attachment

Skills (Motor): Set

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

Cool-down activities (5-minutes) – (1) neck circles, (2) arm and shoulder circles, (3) side bends, (4) trunk twist, (5) hamstring and (6) forward lunge. (See explanation provided).

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
UNIT: VOLLEYBALL

LESSON: 6

OBJECTIVES
Set

EQUIPMENT
1 foam ball/4 students, 4 cones for boundaries, whistle

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>GROUP DAY</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Keep it Up</strong></td>
<td>- 4 students in a square, scattered within boundaries.</td>
<td>- Set in your groups. (Keep it up)</td>
</tr>
<tr>
<td></td>
<td>- Encourage students to call for the ball.</td>
<td>- Challenges:</td>
</tr>
<tr>
<td></td>
<td>- Have group leaders count the number of consecutive sets.</td>
<td>&quot;Which group can keep the ball off the ground the longest?&quot;</td>
</tr>
<tr>
<td></td>
<td>- Encourage students to count out loud.</td>
<td>&quot;Which group can do the most sets in 20 seconds?&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;How long will it take your group to set the ball 10 times?&quot;</td>
</tr>
</tbody>
</table>

| **Keep it Up- Run Around** | - Each group forms 2 single file lines of 2 facing each other. | - Begin by tossing ball underhand to opposite line.                          |
| (for highly skilled)      |                                                                   | - First person in line sets the ball back.                                   |
|                           |                                                                   | - After setting, run to the end of the opposite line.                       |
|                           |                                                                   | - Run to the right to avoid collisions.                                     |
|                           |                                                                   | - Call "I got it!" when it is your turn.                                    |
|                           |                                                                   | - Challenges:                                                               |
|                           |                                                                   |  "How many times in a row can your group set the ball without letting it hit the ground?" |
|                           |                                                                   |  "How many sets can your group do in one minute?"                          |
APPENDIX D:
Literacy Enriched-Physical Education (LE-PE)
Comparison Group Lesson Plans
AEROBIC GAMES UNIT
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON ONE: AEROBIC GAMES

Activity Title (10-minutes): Unit Aerobic Games

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON TWO: AEROBIC GAMES

Activity Title (10-minutes): Unit Aerobic Games

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON THREE: AEROBIC GAMES

Activity Title (10-minutes): Unit Aerobic Games

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FOUR: AEROBIC GAMES

Activity Title (10-minutes): Unit Aerobic Games

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FIVE: AEROBIC GAMES

Activity Title (10-minutes): Unit Aerobic Games

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and correct examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON SIX: AEROBIC GAMES

Activity Title (10-minutes): Unit Aerobic Games

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: Activity, Aerobic, Anaerobic, Endurance, Flexibility, Frequency, Intensity, Oxygen, Pulse, Strength, Inactivity, Stress, Smoking, Nutrition, Physical, Heart, Time, Power, Cardiovascular, Relaxation, Circuit, Station, Balance & Agility.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
BASKETBALL
UNIT
LITERACY Lesson Template

Pre-Activity

• Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON ONE: BASKETBALL

Activity Title (10-minutes): Unit Basketball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON TWO: BASKETBALL  Week: 3  Session: 8

Activity Title (10-minutes): Unit Basketball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON THREE: BASKETBALL

Activity Title (10-minutes): Unit Basketball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FOUR: BASKETBALL

Week: 4  Session: 10

Activity Title (10-minutes): Unit Basketball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FIVE: BASKETBALL

Activity Title (10-minutes): Unit Basketball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON SIX: BASKETBALL

Activity Title (10-minutes): Unit Basketball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: BASKETBALL, HOOP, PICK, PIVOTING, FRONTCOURT, BACKCOURT, PASSING, CHEST PASS, BOUNCE PASS, OVERHEAD PASS, JUMPING, LANE, SHOOTING, DRIBBLING, SCREEN, ROLL, SWITCH, DEFENSE, OFFENSE, POST, GOAL, BLOCKING, REBOUNDING AND READY POSITION.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
SOCCER
UNIT
Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON ONE: SOCCER

Activity Title (10-minutes): Unit Soccer

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON TWO: SOCCER  Week: 5  Session: 14

Activity Title (10-minutes): Unit Soccer

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON THREE: SOCCER

Activity Title (10-minutes): Unit Soccer

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FOUR: SOCCER

Activity Title (10-minutes): Unit Soccer

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FIVE: SOCCER

Week: 6  Session: 17

Activity Title (10-minutes): Unit Soccer

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON SIX: SOCCER      Week: 6        Session: 18

Activity Title (10-minutes): Unit Soccer

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: SOCCER, DODGING, TRAPPING, KICKING, THROWING, FLEEING, CHASING, COOPERATION, MEMORY, DIRECTIONS, SKILL, PROFICIENCY, GRASPING, RUNNING, SKIPPING, JOGGING, BEHAVIOR, TAGGING, DEFENDING, PLAYING, GOAL, TEAM, COMBINING AND GAME

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
FRISBEE
UNIT
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills. Phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON ONE: FRISBEE

Activity Title (10-minutes): Unit Frisbee

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

• Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON TWO: FRISBEE  Week: 7  Session: 20

Activity Title (10-minutes): Unit Frisbee

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON THREE: FRISBEE

Week: 7    Session: 21

Activity Title (10-minutes): Unit Frisbee

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FOUR: FRISBEE       Week: 8     Session: 22

Activity Title (10-minutes): Unit Frisbee

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concert examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FIVE: FRISBEE  Week: 8  Session: 23

Activity Title (10-minutes): Unit Frisbee

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON SIX: FRISBEE

Week: 8  Session: 24

Activity Title (10-minutes): Unit Frisbee

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: FRISBEE, DISC, ULTIMATE, CATCHING, DISTANCE, ACCURACY, ADVANCE, PARTNER, CHALLENGE, BACKHAND, GRIP, BEND, APPROACH, ATTITUDE, BOGEY, BOMB, BIRDIE, EAGLE, EDGE, MARKER, STALLING, TURNOVER, TIPPING AND STABILITY.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)
Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
VOLLEYBALL
UNIT
**Pre-Activity**

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

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**LESSON ONE: VOLLEYBALL**  
Week: _9_  
Session: _25_

Activity Title (10-minutes): Unit Volleyball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

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**Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)**

Have students write down each sight vocabulary word used during the lesson.

Have students write down the definition for each sight vocabulary word used during the lesson.

Have students use each sight vocabulary word used during the lesson in a sentence.

Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON TWO: VOLLEYBALL

Week: 9  Session: 26

Activity Title (10-minutes): Unit Volleyball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON THREE: VOLLEYBALL

Activity Title (10-minutes): Unit Volleyball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

• Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FOUR: VOLLEYBALL

Activity Title (10-minutes): Unit Volleyball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON FIVE: VOLLEYBALL  Week: 10  Session: 29

Activity Title (10-minutes): Unit Volleyball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
LITERACY Lesson Template

Pre-Activity

- Introduction includes telling students what they will be doing today. Instruction should be focused on key words associated with each lesson. You are working on increasing vocabulary skills, phrasing and asking questions about specific words related to the activity will help build their vocabulary. (5-minutes)

LESSON SIX: VOLLEYBALL

Week: 10  Session: 30

Activity Title (10-minutes): Unit Volleyball

Equipment: Journal & pencil

(Literacy): SIGHT WORD VOCABULARY

Key Words to be EMPHASIZED for Sight Vocabulary: VOLLEYBALL, BUMP, FOREARM, SET, SERVE, OVERHEAD, VOLLEY, SHADOW, UNDERHAND, OVERHAND, MODIFY, STRIKING, ACE, CARRYING, COVER, FAULT, MATCH, POINT, SIDE-OUT, POINT, LET, ROTATION, SPIKE AND SWITCH.

1. Shuffle unit vocabulary cards & select 6 cards for the lesson
2. Hold up a card and ask the students to say the vocabulary word. Pronounce the word if the students cannot.
3. Ask if the students know the definition. Provide the definition if students do not know it.
4. Encourage students to link vocabulary word with previous learning.
5. Encourage students to make up sentences using the new vocabulary word by providing specific and concrete examples.

Post-Activity (10-minutes): JOURNAL WRITING (Reflection, Questioning and Probing)

Have students write down each sight vocabulary word used during the lesson.
Have students write down the definition for each sight vocabulary word used during the lesson.
Have students use each sight vocabulary word used during the lesson in a sentence.
Have students write down their reflections and any questions that they have about the lesson.
APPENDIX E:
Procedural Integrity Checklist
Self-Evaluation of LE-PE Instruction Lesson: 

START TIME: ___________ END TIME: ___________

Please evaluate today's instruction by rating the lesson and responding to the questions below.

(Circle the corresponding number) 

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lesson plan was appropriate for student(s).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Lesson plan was organized, well implemented.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Student(s) responded well to lesson.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Difficulties implementing the lesson plan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Lesson included appropriate learning activities and exercises.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Lesson plan had adequate time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Lesson plan was too easy for student(s).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Lesson plan was too hard for student(s).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

9. What adjustments or modifications can you suggest to improve the lesson or the grouping of student(s)?

INSTRUCTOR: ____________________________________________

EVALUATOR: ____________________________________________

DATE: ___________________________ SITE: ___________________________
APPENDIX F:
Literacy Enriched-Physical Education (LE-PE)
Training Manual for Instructors
TRAINING MANUAL

FOR

Project Literacy Enriched-Physical Education (LE-PE)

By

University of Hawaii at Manoa

And

Kaumuki YMCA

Contact Information

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Nathan M. Murata, Ph.D.

E-mail: nmurata@hawaii.edu
### AGENDA

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTIONS</td>
<td>4-5:10</td>
</tr>
<tr>
<td>II. OVERVIEW OF THE LE-PE AFTER-SCHOOL PROGRAM</td>
<td>4:10-4:25</td>
</tr>
<tr>
<td>III. PROGRAM DESIGN</td>
<td>4:25-4:30</td>
</tr>
<tr>
<td>IV. PROCEDURAL INTEGRITY</td>
<td>4:30-4:40</td>
</tr>
<tr>
<td>V. LITERACY STRATEGIES</td>
<td>4:40-5:00</td>
</tr>
<tr>
<td>VI. SPARK OVERVIEW</td>
<td>5:00-5:15</td>
</tr>
<tr>
<td>VII. SUPPLIES TO PURCHASEED</td>
<td></td>
</tr>
<tr>
<td>VIII. SELF-EVALUATION</td>
<td>5:15-5:30</td>
</tr>
<tr>
<td>IX. QUESTIONS</td>
<td></td>
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</tbody>
</table>
OVERVIEW OF THE LE-PE AFTER-SCHOOL PROGRAM

This project proposes to develop and implement a Literacy Enriched – Physical Education (LE-PE) program within the current structure of a statewide after-school program. The basis for infusing literacy and physical activity in one program is based on the fact that movement and learning are linked and that quality physical education can contribute to academic and intellectual development (Sallis, McKenzie, Kolody, Lewis, Marshall, & Rosengard, 1999). Relatedly, with the structure of our statewide after-school program, a literacy enriched physical education program may be the next logical step towards supplemental and enrichment programs during and after school.

Marginal to low reading scores in Hawaii public schools have stirred a debate within the community to the extent that something needs to be done to increase reading achievement for elementary-aged children. Despite the myriad of reading programs (e.g., Title I, Remedial) and strategies (e.g., phonetic awareness, direct instruction, whole language), reading achievement scores are still significantly low in this state. Coupled with the growing epidemic of childhood obesity (HHS, 2000) as a result of increasing levels of physical inactivity in this country and the fact that nearly two-thirds of children and adolescents live with an employed single parent or two parent household calls for a need to reform education possibly in the form of after-school programs.

Interdisciplinary Learning

Interdisciplinary learning is a process that integrates two subject areas to further enhance learning in both areas (Purcell-Cone, Werner, Cone, Mays, & Woods, 1998). Physical education is a unique area for interdisciplinary learning. More specifically,
movement can be used as a medium through which students are provided with opportunities to practice and strengthen language and reading skills in physical education-type activities (Griffin & Morgan, 1998). Three benefits have been suggested to exist with regard to an interdisciplinary curriculum: (1) it can help enhance and enrich student learning; (2) an understanding of other subject areas can be built; and (3) an appreciation for the knowledge and expertise brought by other teachers can be fostered (Cone & Purcell-Cone, 1999). Cone et al., (1998) suggested guidelines for an interdisciplinary learning experience that are in concert with this proposed program: (1) review curricular guides and scope and sequence; (2) select content (themes, topics, issues); (3) gather information; (4) decide on the interdisciplinary teaching model (connected model); (5) create lesson plans, include specific activities; (6) determine scheduling, materials, equipment, organization, facilities; and (7) decide how to assess student learning.

Potential Benefits and Contribution to Improve Education

The benefits of this project are: (1) increased appreciation for reading and physical activity during after-school hours; (2) promote collaboration and interdisciplinary teaching and learning; and (3) assist the schools and communities in gaining a better understanding and appreciation of the overall effects a quality physical activity program can have on children. More importantly while the state of Hawaii has implemented an after-school program (A+), it is in need of having curricula that are aligned with programmatic and performance-based outcomes. Since A+ programs are already situated in Hawaii public schools, the need to make available curricula that is user-friendly, practical and effective is required
PROGRAM DESIGN

This project provides an after-school program with literacy enrichment interwoven with physical education. An interdisciplinary teaching/learning model (connected model) will be employed across three elementary after-school programs, 3x per week for two academic quarters. In support of a much needed structured curricula for Hawaii's after-school program (A+) this project fills a much needed void. A total of 80 (3rd, 4th & 5th graders) will participate in this program for which Project LE-PE will be implemented. More importantly this project aligns with the Content and Performance-based academic standards espoused by the state Department of Education. To this end, a U.S. Department of Education designated exemplary effective program called Sports, Play, and Active Recreation for Kids (SPARK) (McKenzie & Rosengard, 1993) will be adapted/modified with literacy-embedded content. The modified version of SPARK will then be left as permanent products at each participating site.

Methods and Mode of Analysis

Project Literacy Enriched – Physical Education (LE-PE). Project LE-PE was developed and piloted under the criteria of the 21st Century Community of Learners. From this pilot project (2000-2001), information relative to the appropriateness and efficacy of academic and physical components were stressed. At one site, Project LE-PE employed the interdisciplinary teaching/learning tactic to infuse literacy and physical activity (two major educational priorities espoused by the state of Hawaii). Data from this pilot program indicate that 3rd, 4th and 5th graders were more inclined to participate in reading and writing activities; gained more appreciation for physical
activity during after-school hours; and appeared to be more attentive in class during the program.

**Design of project.** This project will provide children with opportunities to participate in physical activities that include supplemental literacy-related activities that are planned with a reading specialist to enhance skills. A Posttest only control group design will be employed (Campbell & Stanley, 1969). Campbell and Stanley (1969) suggested that “Furthermore, in educational research, particularly in the primary grades, we must frequently experiment with methods for the initial introduction of entirely new subject matter, for which pretests in the ordinary sense are impossible...p. 25.” Experimental group will consist of those students who participate in the after-school A+ program. The control group consists of those 3rd, 4th & 5th graders who do not participate in the after-school A+ program. The dependent variables will be the TGMD-2 locomotor and object control subtests, FITNESSGRAM, sight word vocabulary and student journals. The independent variable constitutes the modified SPARK (Sports, Play, and Active Recreation for Kids) (McKenzie & Rosengard, 1993) curriculum for those 3rd, 4th and 5th graders who participate in the after-school A+ program. Data will be analyzed both descriptively (i.e., means and standard deviations) and inferentially (i.e., Analysis of Variance with Repeated Measures and effect sizes).

**Rationale.** Since the projected sites may have its own reading program, this project attempts to provide a generic literacy-enriched program that includes: read aloud, sight word vocabulary, and journal writing. This project will take place after school three days per week (i.e., Tuesday, Thursday, and Friday) for five months (two academic quarters) as a supplement to the language arts and physical education curricula already
in place at targeted sites. Physical activities for this project will be adopted from and modified as needed from the SPARK physical education program. SPARK has been identified as an exemplary program by the Program Effectiveness Panel of the U.S. Department of Education after careful review of the quality of the instructional materials, the program evaluation design and significance on impact on learner achievements. Experiential knowledge of the community (e.g., parental involvement) and information about curricula from the school staff (e.g., librarians) will further assist in the development of the project. A detailed plan of work can be found in Appendix A.

**Annual Goals of the Project.** These goals are based on the Hawaii Content and Performance Standards (1999) for Physical Education and Language Arts: (1) become competent movers (balance, locomotor) in their environment (Physical Education Standard 1 & 2); (2) improve in health-related fitness (Physical Education Standard 3 & 4); (3) read and interpret passages through movement experiences (Language Arts Standard 4); and (4) demonstrate confidence in public speaking and role-playing various stories and passages (Language Arts Standard 3).

**Specific goals (questions to be addressed) of the project:**

1. Will there be a difference in physical activity levels and literacy for 3rd, 4th & 5th graders who provided with an after-school interdisciplinary curriculum of physical activity and literacy?

2. Will there be a difference in perception of physical activity and literacy (enjoyment of reading) for 3rd, 4th & 5th graders who provided with an after-school interdisciplinary curriculum of physical activity and literacy?
3. Will there be a difference in health-related physical activities for 3rd, 4th & 5th graders who are provided with an after-school interdisciplinary curriculum of physical activity and literacy as measured by the FITNESSGRAM?

4. Will sites adopt this modified SPARK curriculum as part of their physical education program in order to augment and enhance literacy skills?

Sites for testing project. With collaboration with the local Young Men's Christian Association (YMCA), the following elementary schools will participate: Kuhio and Waikiki. Participants (learners) come from an array of socio-economic status, Title I, free lunch programs, English as a Second Language Learners, to middle class and affluent.

Evaluation Methods

This project will be evaluated both quantitatively and qualitatively. More specifically, quantitative data will include locomotor and object control scores garnered from the Test of Gross Motor Development-2 (Ulrich, 2000) and the Prudential FITNESSGRAM (Cooper Institute, 1999). Literacy data will be generated by scores as on sight word vocabulary and reading comprehension (no formal assessment will be used, because of the myriad of reading programs currently employed at these two sites) [Evaluation for Goal 1]. Qualitative data will be gathered by student journals, student-teacher-parent interviews, and anecdotal notes from classroom teachers. Questions relative to this evaluation procedure will determine the participants' overall satisfaction on the project, did the project influence (positively or negatively) a participant's reading interest, how parents feel about their child's increased attention to reading and physical activity and classroom teachers' perceptions of the child's overall attentiveness in class
[Evaluation of Goals 2 and 3]. In addition to these formative and summative forms of evaluation, a *procedural integrity checklist* (Appendix B) will be used to evaluate whether or not the adapted physical education teacher is implementing the SPARK curriculum and related literacy content appropriately [Evaluation of Goal 4].
PROCEDURAL INTEGRITY

I. LESSON PLANS
   A. TIME
      1. PREACTIVITY (WARM-UP 15-MINUTES)
      2. ACTIVITY (15-MINUTES)
      3. COOL-DOWN ACTIVITY (5-MINUTES)
      4. POST ACTIVITY (JOURNAL WRITING 10-MINUTES)
   B. LESSON OBJECTIVES
      1. FOLLOW SPARK'S LESSON OBJECTIVES & TEACHING CUES

II. INSTRUCTORS
   A. DOCUMENT ALL ABSENSES
   B. DOCUMENT ALL VARIATIONS TO THE LESSON PLANS ON THE LESSON AND GIVE TO PROJECT COORDINATOR.
LITERACY STRATEGIES

I. SIGHT WORD VOCABULARY

A. WORD LIST (24 SIGHT WORDS PER PA UNIT)

B. PROCEDURE FOR INTRODUCING NEW VOCABULARY

1. Shuffle unit vocabulary cards (24 sight words per unit) & select 6 cards for each lesson.

2. Hold up a card with the vocabulary word on it, say the word, and ask the students to repeat the word.

3. Ask if the students know the definition. Provide the definition if students do not know it.

4. Discuss the vocabulary word with the students, encouraging them to link it with previous learning.

5. Encourage students to make up sentences using the vocabulary word by giving examples.

6. Provide specific and concrete examples.

II. JOURNAL WRITING

1. Review the newly introduced words by calling them out, and have students respond by writing down the words, the definitions, and using each word in a sentence.

2. Journal writing activity requires current date on all journal entries.

3. On the outside of every journal will contain the student’s initials (NO NAMES), gender, and grade level.
SPARK OVERVIEW
ORGANIZATION AND MANAGEMENT SUGGESTIONS

To ensure a safe and efficient lesson teachers should:

1. Establish a system of helpers to set up and put away equipment.
2. Dress for movement, at least by wearing comfortable, safe, athletic shoes.
3. Be safety conscious! Examine the instructional area and equipment to assure that safe conditions exist. Be aware of drills or games that could be hazardous if not played properly.
4. Students excused from physical education for the day may be able to participate in low-intensity activities or help with management tasks.
5. Begin class with (brief) warm-up activities.
6. Demonstrate enthusiasm for physical activity.
7. Provide high rates of instructional and motivational feedback. Ensure positive student interactions outnumber corrective ones.
8. Speed the transition from a Type 1 to a Type 2 activity, by preparing the equipment in advance.
9. Ensure children have adequate amounts of equipment and it is ready for their use.
10. Be activity conscious! Avoid lengthy explanations, drills, and games that do not encourage movement.
11. Be line conscious! Be aware of how long children are waiting for a turn at bat, a chance at the pull-up bar, etc. Divide students into smaller groups, use more equipment, set up activity/drill stations.
12. Remember to give as much individual help to students as possible. A good time to do this is when students are working in small groups.
13. Before cooling down at the end of a lesson, have students put away all equipment. Students without equipment should walk immediately to designated cool down area.
COMMON MANAGEMENT CONCERNS ADDRESSED

CONCERN:
1. "I don't have time to set up before class."

SUGGESTIONS:
- Have one or two students leave a few minutes early to set up for class.
- Set up after students are engaged in a Type 1 activity (e.g., while they are jogging for 7 minutes, you could be setting up for Frisbee).
- Have one or two students lead a warm-up routine for the class while you (and a helper?) set up for Type 1 and/or Type 2.
- Team teach: One instructor leads warm-up with both classes while the other sets up.

CONCERN:
2. "Do I have to follow the SPARK Curriculum in order?"

SUGGESTION:
- Because the SPARK Curriculum is written in a teaching progression, try to follow the order established. However, if repeating a lesson due to student need, or if playing "Target Frisbee" again sounds like a great idea, go ahead. Attempt to progress as far in sequence as possible within the weekly/monthly time frame, but don't feel pressured to finish the unit plan. Individual classes progress at different rates.

CONCERN:
3. "I'm spending a lot of time prepping for SPARK."

SUGGESTION:
- In conversations with hundreds of teachers (both classroom teachers and specialists) implementing SPARK, we have found that preparation time varies with the individual instructor. Speak with a SPARK Consultant: (800) SPARK PE. They will provide suggestions to streamline preparation.

CONCERN:
4. "My class has some students that are very skilled and knowledgeable in the P.E. unit we're in now. How do I keep them on task and motivated?"

SUGGESTION:
- Recruit highly skilled students to be helpers and/or assistants. Have these students give individual attention to those in need. Also, explain to this group that at all levels of sport, fundamentals and review are done repeatedly. The best coaches say, "You can never be too good at the fundamentals."

CONCERN:
5. "How do I prevent students from complaining and arguing?"

SUGGESTIONS:
- Ensure students know game rules. Appoint group leaders to briefly discuss any rule questions. No other students may intervene. If they cannot agree within 15 seconds, they should speak with the instructor.
- Be certain students have progressed through developmentally appropriate drills and lead-up activities before attempting game play. Participation in even a low-competition sport game, prior to proper student skill development, may cause frustration and lead to disagreements.
- Before introducing your class to games or drills that may raise the competitive level, speak with your students about good sporting behavior, reinforce it with praise when you observe it, and reward individuals or groups who demonstrate it.

San Diego State University
ORGANIZING STUDENTS INTO GROUPS

1. When possible, use pre-existing groups to reduce inactive time and provide for a smooth transition.

2. If pre-existing groups don't exist, create your own. Do not let students choose teams. This takes time and causes many other problems. In order to organize groups quickly, use the following methods:
   a. Play formation games such as Back to Back or Mingle.
   b. Number or letter individuals (count off A, B, A, B or 1, 2, 1,2). All children with the same letter or number are in the same group.
   c. Hand out sticks or cards that have characteristics to identify different teams.
   d. Use specific characteristics to determine groups:
      1) Hair/eyes: Blondes and red-heads vs brunettes; brown eyes vs blue and green
      2) Birthdays: January-June vs July-December
      3) Names: First or last names A-L vs M-Z
      4) Clothing: White tops vs colored tops
      5) Pets: Those with pets vs those without
   e. Students select partners. One squats down, the other remains standing. Squatters go on one team, those standing are on the opposite team. (May also be done where one student identifies themselves as an "A," the other is a "B.")
   f. Students pair up. Count off pairs (1's and 2's). Pairs stay on same team.
MODIFYING CURRICULA AND INSTRUCTION TO RESPOND TO STUDENT NEEDS

An instructor of SPARK Physical Education should, on a daily basis, be aware of individual differences in student motor and fitness development. These may be influenced by the child’s:

- age and grade level
- previous experiences in physical education
- physical and/or mental challenges
- availability/accessibility of after school recreation and sports programs
- cultural background of parents
- parental participation in physical activity
- parental availability to transport the child to places to be active

SPARK Physical Education curriculum is written to provide safe, enjoyable, active, and developmentally appropriate activities, games, and sports for children in grades three through six. However, the physical education teacher is responsible to modify lessons and instructional methodology to respond effectively to the needs of individual students.

Considerations:
- The quantity of physical education provided (length and frequency of classes) will have a direct effect on how skilled and physically fit students become.
- The quality of physical education provided will also directly effect student performance and development. Teacher ability will influence the pace at which children progress through a unit. Teachers new to SPARK are likely to be less efficient in management and organization of students than those with experience. Furthermore, the instructor’s professional preparation (prior course work, workshops, etc.) will also play a factor in how much can be accomplished within each physical education class.
- Proper scope and sequence is written into each SPARK instructional unit; that is, daily lesson plans become progressively more challenging as students skills improve.
- Fundamental movement and motor skills improve through repetition and practice, therefore, overlap among grades is important and necessary (e.g., throwing and catching a frisbee is introduced in third grade and repeated throughout their lives).
- Lessons and/or lesson options for advanced learners are provided towards the end of each unit.
- Repeating lessons or lesson segments is encouraged when appropriate—regardless of grade level of students. Two indicators are:
  1. Too many students (over 30%) not demonstrating desired skill competency.
  2. Students not feeling successful at the end of practice time, and/or appearing discouraged, frustrated, or unhappy.

Therefore, the SPARK authors make the following suggestions regarding grade level progressions for the Type 2 instructional units (skill/sport related fitness):

Note: All teachers, regardless of grade level, should not feel pressured to finish an instructional unit. Units include advanced activities and lessons to provide new material and challenges for advanced learners.
• Teachers of third grade students: Advance through lessons and teaching progressions slowly. Repeat a lesson segment when appropriate. Attempt to provide as much individual help as possible to those in need. As students demonstrate improvement, begin combining skills and playing “lead-up” games in the unit. It is not recommended that students advance to playing games of basketball, soccer, volleyball within the four week instructional unit. The emphasis should be placed on moving while practicing and learning fundamental skills which comprise those activities; not on the rules, strategies, and positions of players of the un-modified sport.

• Teachers of fourth grade students: Although students may have been introduced to the fundamentals of the sport in the previous year, begin instruction again at the beginning of the unit. Review the basics and allow children time to practice. Progress through the unit, providing additional challenge and new skills/drills as students demonstrate success.

In a four-week sport skill unit, (Type 2 activity), it is recommended that if students are ready -- the instructor attempt to combine skills and progress to small-sided games by the beginning of the last week.

• Teachers of fifth grade students: Fifth grade students who have received sufficient minutes of physical education will move through lessons at the pace they are presented in the curricula; possibly a bit faster. However, start at the beginning of the unit to review and practice fundamentals.

Fifth grade classes may be ready for the modified sport games by the beginning of the third week of instruction if not sooner. At this level, low competition, non-eliminative, tournament play may be possible. Refer to the “Tournament” page in this section for information.

• Teachers of sixth grade students: Introduce each unit by reviewing and practicing the fundamentals. Observe and assess student skill levels specific to the sport. For example, in volleyball, students may not remember the proper way to forearm pass (bump) or overhead pass (set). It may be necessary to reference the first lesson in SPARK to “break the skill down” and instruct it using the “whole-part-whole” method.

Sixth grade classes should begin combining skills and playing modified sport games when ready. Furthermore, adding more actual sport rules (providing they promote student activity levels, not reduce them), and player position strategies is suggested. At this level, low competition, non-eliminative, tournament play is recommended. Refer to the “Tournament” page in this section for information.

Suggestions pertinent to the SPARK Type 1 units (health related fitness):

• Teachers of students grades three-six: Type 1 units attempt to enhance various fitness parameters (e.g., cardiovascular, muscular strength and endurance, etc.) through enjoyable methodology and techniques (disguising the fitness element). Instructors should give consideration to the FIT principle = frequency, intensity, and time. Gradual increases in each component of FIT will result in ongoing student improvement.

Personal improvement should be emphasized rather than competition among students.
WARM-UP AND COOL-DOWN

WARMING UP

Warming-up before participating in vigorous exercise or explosive movements is important, even for children. Warming-up properly prepares the muscles, ligaments, and joints, and the heart and circulatory system for additional activity. It also helps reduce injury and improve motor skill performance. Several methods of warm-up are appropriate:

1. Walking/jogging while moving the arms slowly
2. Doing slow-paced aerobics
3. Starting the game or activity at a low intensity
4. Stretching

Be sure to warm-up children’s body parts that are going to be involved in any explosive action during class. For example, if throwing for distance or speed is demanded during a game, the children should warm-up beforehand by throwing easy, doing simulated throwing, or at least by moving the arms through the full range of motion several times.

Warm-up time provides an excellent opportunity to establish an instructional set by pointing out important facts and introducing skill cues and strategies.

COOLING DOWN

Toward the end of class, the children should cool-down gradually. Tapering off from vigorous activity helps children’s bodies return to normal functioning levels which will make the transition to classroom work easier. Cooling down properly also helps to reduce blood pooling and to eliminate lactic acid build up. An efficient way to cool-down is to gradually reduce the intensity of the exercise or game being conducted. Additionally, it is appropriate to walk for a few minutes while stretching the body parts that were used extensively during class.

Stretching to improve joint flexibility should take place during the cool-down. This is an excellent time to review important instructional cues and strategies, praise students or groups who were working well together, demonstrating cooperative behavior, trying hard, etc.

During warm-up and cool-down segments it is a good time to discuss: appropriate grade level exercise physiology, biomechanical principles, socio-cultural and historical aspects of physical education, participation in out-of-school activity programs, and other topics which might provide a comprehensive approach to physical education.

SAMPLE WARM-UP OR COOL-DOWN ROUTINE

The SPARK “Simple Six”

1) Neck circles 2) Arm and shoulder circles 3) Side bends 4) Trunk twist 5) Hamstring stretch
6) Side/forward lunge (Note: Instructions on how to teach each of these is provided on the pages to follow.)
WARM-UP (OR) COOL-DOWN ACTIVITIES

UNIT: WARM-UP/COOL-DOWN ROUTINE
LESSON: ALL

Note: Always have students stretch with knees slightly bent, never locked.

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint flexibility/cool down</td>
<td>Music if available</td>
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<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ORGANIZATION</th>
<th>TEACHING CUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Circles</td>
<td>-Squads, circle, semi-circle, or scattered within boundaries.</td>
<td>-Roll head from side to side bringing chin down in front.</td>
</tr>
<tr>
<td></td>
<td>-Begin cool down as students bring in equipment. Teacher or student(s) can lead.</td>
<td>-Never roll head back sharply.</td>
</tr>
<tr>
<td></td>
<td>-Do 8-10 repetitions of each exercise.</td>
<td></td>
</tr>
<tr>
<td>Shoulder Shrugs</td>
<td></td>
<td>-Up and down</td>
</tr>
<tr>
<td>Shoulder Rolls</td>
<td></td>
<td>-Forward and backward</td>
</tr>
<tr>
<td>Arm Circles</td>
<td></td>
<td>-Gently circle arms forward and backward</td>
</tr>
<tr>
<td>Arm Stretches</td>
<td>-All stretches should be static (no bouncing) and held for at least ten seconds.</td>
<td>-Bring arm across body, gently pressing on the elbow with other hand.</td>
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<tr>
<td></td>
<td></td>
<td>-Reach one hand up and drop it down parallel to spine. Gently press on the elbow with the other hand. Change arms.</td>
</tr>
<tr>
<td>Pectoralis Stretch</td>
<td></td>
<td>-Clasp hands behind back. Lift up and away from body.</td>
</tr>
<tr>
<td>Ladder</td>
<td></td>
<td>-Extend arms above head and reach up alternating hands.</td>
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</table>
**UNIT: WARM-UP/COOL-DOWN ROUTINE (CONT.)**

**LESSON: ALL**

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Description</th>
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<tr>
<td><strong>Side Bends</strong></td>
<td>-Spread feet comfortably, raise one hand above head, arm touching ear, and lean slightly. The other hand supports hips. Change sides.</td>
</tr>
<tr>
<td><strong>Trunk Twists</strong></td>
<td>-Spread feet comfortably. Twist body slowly from side to side.</td>
</tr>
<tr>
<td><strong>Lunges</strong></td>
<td>-Spread feet further, bend one knee to stretch inner thigh. Make sure foot and bent knee are facing the same direction. Change legs.</td>
</tr>
</tbody>
</table>
| **Hamstring Stretches**| -With feet close together and knees slightly bent, curl over and reach for ankles or toes.  
- Cross feet and hold. Change feet.  
- Spread feet apart, knees slightly bent, reach for the opposite foot/ankle and raise other hand and look at it. |
| **Quadricep Stretch**  | -Balancing on one foot, bend other leg and gently pull the foot back behind with opposite hand. Keep knees in alignment with body. |
| **Gastrocnemius Stretch** | -Step and lean forward with one foot, bend knee, and keep back heel on the ground. Both feet should be facing forward.  
- Lean back, bend the back leg, and straighten the front leg. Change feet. |
| **Foot Circles**       | -Balancing on one foot, circle other foot slowly, both directions. Change feet. |
JUMPING JACKS
HILL CLIMBERS
JOG IN PLACE
CURL-UPS
PUSH-UPS
FORWARD LUNGES
SUPPLIES TO PURCHASE

1. JOURNALS 100
2. BEAN BAGS 40
3. CONES 24
4. SCARVES 12
5. BASKETBALLS 24
6. FOAM BALLS 48
7. HOOPS 12
8. SOCCER BALLS 24
9. FRISBEES 12
10. PENCILS 120
SELF-EVALUATION

NAME_____________________________ DATE______________

Please circle the correct answer.

1. The warm-up activities for each lesson take longer than five minutes.
   a. True
   b. False

2. All the sight words for each physical activity unit (e.g. aerobic games, basketball, soccer, frisbee & volleyball) will be used in each lesson.
   a. True
   b. False

3. The SPARK lesson organization can be changed by the instructor (e.g. a 2-on-2 game can be changed to a 5-on-5 game).
   a. True
   b. False

4. Journal writing is the first activity in each lesson.
   a. True
   b. False

5. You can skip the warm-up and cool-down activities consist of the same activities.
   a. True
   b. False

6. During sight word vocabulary the instructor should encourage students to make up sentences even though it does not make sense and correct if necessary.
   a. True
   b. False

7. When writing in the journals, students should write down the definitions of all the sight words used in the lesson that day.
   a. True
   b. False

8. During the main activity the instructor can utilize as much of the sight words as possible.
   a. True
   b. False

9. The instructor with the control group teaches both the literacy and physical activity components in program.
   a. True
   b. False

10. During the literacy portion (sight words), you should discuss and explain each shuffled sight words.
    a. True
    b. False
# TGMD-2

## Test of Gross Motor Development—Second Edition

### Profile/Examiner Record Form

**Section I. Identifying Information**

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**Section II. Record of Scores**

### First Testing

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<th>Locomotor</th>
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<th>Percentile</th>
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**Section III. Testing Conditions**

**A. Place Tested**

**Interfering**

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**Not Interfering**

**Section IV. Other Test Data**

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**Section V. Profile of Standard Scores**

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Additional copies of this form (#9262) may be purchased from PRO-ED, 8700 Shoal Creek Blvd., Austin, TX 78757-6897. Fax 800/397-7633.
### Locomotor Subtest

<table>
<thead>
<tr>
<th>Skill</th>
<th>Materials</th>
<th>Directions</th>
<th>Performance Criteria</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Score</th>
</tr>
</thead>
</table>
| 1. Run | 60 feet of clear space, and two cones | Place two cones 50 feet apart. Make sure there is at least 8 to 10 feet of space beyond the second cone for a safe stopping distance. Tell the child to run as fast as he or she can from one cone to the other when you say "Go." Repeat a second trial. | 1. Arms move in opposition to legs, elbows bent  
2. Brief period where both feet are off the ground  
3. Narrow foot placement landing on heel or toe (i.e., not flat footed)  
4. Nonsupport leg bent approximately 90 degrees (i.e., close to buttocks) |         |         |       |
| 2. Gallop | 25 feet of clear space, and tape or two cones | Mark off a distance of 25 feet with two cones or tape. Tell the child to gallop from one cone to the other. Repeat a second trial by galloping back to the original cone. | 1. Arms bent and lifted to waist level at takeoff  
2. A step forward with the lead foot followed by a step with the trailing foot to a position adjacent to or behind the lead foot  
3. Brief period when both feet are off the floor  
4. Maintains a rhythmic pattern for four consecutive gallops |         |         |       |
| 3. Hop | A minimum of 15 feet of clear space | Tell the child to hop three times on his or her preferred foot (established before testing) and then three times on the other foot. Repeat a second trial. | 1. Nonsupport leg swings forward in pendular fashion to produce force  
2. Foot of nonsupport leg remains behind body  
3. Arms flexed and swing forward to produce force  
4. Takes off and lands three consecutive times on preferred foot  
5. Takes off and lands three consecutive times on nonpreferred foot |         |         |       |
| 4. Leap | A minimum of 20 feet of clear space, a beanbag, and tape | Place a beanbag on the floor. Attach a piece of tape on the floor so it is parallel to and 10 feet away from the beanbag. Have the child stand on the tape and run up and leap over the beanbag. Repeat a second trial. | 1. Take off on one foot and land on the opposite foot  
2. A period where both feet are off the ground longer than running  
3. Forward reach with the arm opposite the lead foot |         |         |       |
### Locomotor Subtest

<table>
<thead>
<tr>
<th>Skill</th>
<th>Materials</th>
<th>Directions</th>
<th>Performance Criteria</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Horizontal Jump</td>
<td>A minimum of 10 feet of clear space and tape</td>
<td>Mark off a starting line on the floor. Have the child start behind the line. Tell the child to jump as far as he or she can. Repeat a second trial.</td>
<td>1. Preparatory movement includes flexion of both knees with arms extended behind body 2. Arms extend forcefully forward and upward reaching full extension above the head 3. Take off and land on both feet simultaneously 4. Arms are thrust downward during landing</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Slide</td>
<td>A minimum of 25 feet of clear space, a straight line, and two cones</td>
<td>Place the cones 25 feet apart on top of a line on the floor. Tell the child to slide from one cone to the other and back. Repeat a second trial.</td>
<td>1. Body turned sideways so shoulders are aligned with the line on the floor 2. A step sideways with lead foot followed by a slide of the trailing foot to a point next to the lead foot 3. A minimum of four continuous step-slide cycles to the right 4. A minimum of four continuous step-slide cycles to the left</td>
<td></td>
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</table>

**Locomotor Subtest Raw Score (sum of the 6 skill scores)**

### Object Control Subtest

<table>
<thead>
<tr>
<th>Skill</th>
<th>Materials</th>
<th>Directions</th>
<th>Performance Criteria</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Striking a Stationary Ball</td>
<td>A 4-inch lightweight ball, a plastic bat, and a batting tee</td>
<td>Place the ball on the batting tee at the child's belt level. Tell the child to hit the ball hard. Repeat a second trial.</td>
<td>1. Dominant hand grips bat above nondominant hand 2. Nonpreferred side of body faces the imaginary tosser with feet parallel 3. Hip and shoulder rotation during swing 4. Transfers body weight to front foot 5. Bat contacts ball</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Stationary Dribble</td>
<td>An 8- to 10-inch playground ball for children ages 3 to 5; a basketball for children ages 6 to 10; and a flat, hard surface</td>
<td>Tell the child to dribble the ball four times without moving his or her feet, using one hand, and then stop by catching the ball. Repeat a second trial.</td>
<td>1. Contacts ball with one hand at about belt level 2. Pushes ball with fingertips (not a slap) 3. Ball contacts surface in front of or to the outside of foot on the preferred side 4. Maintains control of ball for four consecutive bounces without having to move the feet to retrieve it</td>
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**Skill Score**
<table>
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<th>Skill</th>
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<th>Directions</th>
<th>Performance Criteria</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Score</th>
</tr>
</thead>
</table>
| 3. Catch      | A 4-inch plastic ball, 15 feet of clear space, and tape | Mark off two lines 15 feet apart. The child stands on one line and the tosser directly to the child with a slight arc aiming for his or her chest. Tell the child to catch the ball with both hands. Only count those tosses that are between the child's shoulders and belt. Repeat a second trial. | 1. Preparation phase where hands are in front of the body and elbows are flexed  
2. Arms extend while reaching for the ball as it arrives  
3. Ball is caught by hands only |         |         |       |
| 4. Kick       | An 8- to 10-inch plastic, playground, or soccer ball; a beanbag; 30 feet of clear space; and tape | Mark off one line 30 feet away from a wall and another line 20 feet from the wall. Place the ball on top of the beanbag on the line nearest the wall. Tell the child to stand on the other line. Tell the child to run up and kick the ball hard toward the wall. Repeat a second trial. | 1. Rapid continuous approach to the ball  
2. An elongated stride or leap immediately prior to ball contact  
3. Nonkicking foot placed even with or slightly in back of the ball  
4. Kicks ball with instep of preferred foot (shoe-laces) or toe |         |         |       |
| 5. Overhand Throw | A tennis ball, a wall, tape, and 20 feet of clear space | Attach a piece of tape on the floor 20 feet from a wall. Have the child stand behind the 20-foot line facing the wall. Tell the child to throw the ball hard at the wall. Repeat a second trial. | 1. Windup is initiated with downward movement of hand/arm  
2. Rotates hip and shoulders to a point where the nonthrowing side faces the wall  
3. Weight is transferred by stepping with the foot opposite the throwing hand  
4. Follow-through beyond ball release diagonally across the body toward the nonpreferred side |         |         |       |
| 6. Underhand Roll | A tennis ball for children ages 3 to 6; a softball for children ages 7 to 10; two cones; tape; and 25 feet of clear space | Place the two cones against a wall so they are 4 feet apart. Attach a piece of tape on the floor 20 feet from the wall. Tell the child to roll the ball hard so that it goes between the cones. Repeat a second trial. | 1. Preferred hand swings down and back, reaching behind the trunk while chest faces cones  
2. Strides forward with foot opposite the preferred hand toward the cones  
3. Bends knees to lower body  
4. Releases ball close to the floor so ball does not bounce more than 4 inches high |         |         |       |

**Object Control Subtest Raw Score (sum of the 6 skill scores)**
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<th>Name</th>
<th>Birth date</th>
<th>Sex</th>
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<th>Weight</th>
<th>Aerobic capacity</th>
<th>Curl-up</th>
<th>Upper body</th>
<th>Trunk lift</th>
<th>Flexibility</th>
<th>Skinfolds</th>
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Table 5.1 *FITNESSGRAM* Standards for Healthy Fitness Zone*

**BOYS**

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<th>Walk test &amp; ( \text{V}_0\text{max} ) ml/kg/min</th>
<th>Percent fat</th>
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* Number on left is lower end of HFZ; number on right is upper end of HFZ.
**Test scored Pass/Fail; must reach this distance to pass.
### Table 5.2  *FITNESSGRAM* Standards for Healthy Fitness Zone*

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### Trunk lift inches Push-up complete Modified pull-up complete Pull-up complete Flexed arm hang seconds Back-saver sit & reach** inches Shoulder stretch

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<th>Push-up complete</th>
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* Number on left is lower end of HFZ; number on right is upper end of HFZ

**Test scored Pass/Fail; must reach this distance to pass.

APPENDIX G:
Instructors Self-Evaluation
SELF-EVALUATION

NAME_________________________________________ DATE_________________

Please circle the correct answer.

1. The warm-up activities for each lesson take longer than five minutes.
   a. True
   b. False

2. All the sight words for each physical activity unit (e.g. aerobic games, basketball, soccer, frisbee & volleyball) will be used in each lesson.
   a. True
   b. False

3. The SPARK lesson organization can be changed by the instructor (e.g. a 2-on-2 game can be changed to a 5-on-5 game).
   a. True
   b. False

4. Journal writing is the first activity in each lesson.
   a. True
   b. False

5. You can skip the warm-up and cool-down activities consist of the same activities.
   a. True
   b. False

6. During sight word vocabulary the instructor should encourage students to make up sentences even though it does not make sense and correct if necessary.
   a. True
   b. False

7. When writing in the journals, students should write down the definitions of all the sight words used in the lesson that day.
   a. True
   b. False

8. During the main activity the instructor can utilize as much of the sight words as possible.
   a. True
   b. False

9. The instructor with the control group teaches both the literacy and physical activity components in program.
   a. True
   b. False

10. During the literacy portion (sight words), you should discuss and explain each shuffled sight words.
    a. True
    b. False
APPENDIX H:
Sight Word Vocabulary
Sight word vocabulary

Aerobic Unit

1. Circuit – a path; electrical current flow.
2. Power – the faculty of doing or performing; energy, force, strength.
3. Heart – the organ in animals that pumps blood.
5. Flexibility – easy bent; yielding to persuasion.
6. Time – the measure of duration; an age or period of history; a moment or date fixed for an event.
7. Pulse – the rhythmic throb of an artery as the blood passes through, matching the beat of the heart.
8. Agility – moving easily; active and nimble in body.
9. Physical – relating to the body; opposite of mental; laws and forces of physics.
10. Relaxation – diminution of tension; diversion or recreation.
11. Cardiovascular – pertaining to or involving the heart and blood vessels.
12. Activity – using motion or force to produce an effect.
13. Intensity – giving more force to; thorough, deep concentrated.
14. Anaerobic – a type of exercise in which short, vigorous bursts of activity requiring little additional oxygen are performed; opposite of aerobic.
15. Aerobic – requiring the presence of oxygen; opposite of anaerobic.
16. Oxygen – a gas without color or smell, essential to all life, animals and vegetable.
17. Stress – compulsion, pressure.
18. Smoking – the act of using tobacco in a pipe, cigar or cigarette.
19. Station – the place where a person or thing stands; a position; a stopping place.
20. Inactivity – inert; sluggish; idle.
21. Endurance – ability to endure or strength to bear.
22. Nutrition – that which nourishes, food; the process by which plants and animals absorb and utilize nourishment.
23. Balance – evenness of disposition; to make equal; to bring into equilibrium.
24. Frequency – the repeated occurrence of anything at brief intervals.
Basketball Unit

1. Basketball – the round leather ball with which the game is played.
2. Pick – a legal method of providing space for a teammate to get open for a shot or cut by using your body as a wall and screening the opponent.
3. Hoop – the basket or metal ring or rim; a successful field goal.
4. Backcourt – the half of the court that is farthest away from the offensive basket.
5. Frontcourt – the half of the court where the ball is in play; the offensive team’s half of the court.
6. Rebounding – a missed shot retrieved by a player.
7. Dribbling – continuous bouncing of the basketball with one hand at a time to advance or control the ball.
8. Chest pass – a pass made from the chest area of the body to a teammate.
9. Post – a name for the player(s) occupying the lane area down low near the basket.
10. Ready position – the correct position a player should be in when preparing to receive and/or pass a basketball.
11. Screen – a legal method of providing space for a teammate to get open for a shot or cut by using your body as a wall and picking the opponent.
12. Pivoting – the act of turning on your foot to change direction.
13. Shooting – any attempt to shoot the ball into the basket in order to score.
14. Switch – a defensive technique in which players who have man to man assignments exchange responsibilities to combat an offensive maneuver of using screens by opposing teams.
15. Defense – the team without the ball, which tries to prevent the opponent from scoring.
16. Offense – team that has possession of the ball.
17. Blocking – a foul whereby a defensive player illegally blocks the path of an offensive player.
18. Jumping – propelling yourself off the ground.
19. Overhead pass – a two handed pass taken from above the head.
20. Roll – rotary motion of an object around its own axis.
22. Passing – movement of the ball from one player to another by means of a toss, throw or handing off.
23. Lane – the rectangular area at both ends of the court in the middle of the baseline area.
24. Bounce pass – a pass made by using one bounce of the ball.
Soccer Unit

1. Soccer – a football game in which two teams of eleven players try to kick or head a ball into the opponent’s goal.
2. Tagging – touching a player in a game.
3. Behavior – manner of acting or conducting yourself.
4. Proficiency – skillfulness in the command of fundamentals deriving from practice and familiarity.
5. Memory – the power of retaining and recalling past experience.
7. Directions – a message describing how something is to be done.
8. Running – traveling on foot at a fast pace.
10. Cooperation – joint operation or action.
12. Team – a cooperative unit.
13. Throwing – project through the air.
14. Skipping – a gait in which steps and hops alternate.
15. Trapping – using a body part to control a moving ball.
16. Skill – an ability that has been acquired by training.
18. Game – a contest with rules to determine a winner.
19. Chasing – the act of pursuing in an effort to overtake or capture.
20. Jogging – running at a jog trot as a form of exercise.
22. Defending – attempting to or designed to prevent an opponent from winning or scoring.
23. Kicking – the act of delivering a blow with the foot.
24. Playing – the action of taking part in a game or sport or other recreation.
Frisbee Unit

1. Frisbee – a trademark used for a plastic disc-shaped toy that players throw and catch.
2. Marker – a defensive player in ultimate who is guarding an offensive player in possession of the disc.
3. Challenge – a call to engage in a contest or competition.
4. Backhand – a cross-body throw with the thumb on top of the disc and the fingers on the underside,
5. Partner – one that is united or associated with another or others in an activity.
6. Ultimate – being most distant or remote; farthest.
7. Grip – to seize, grasp.
8. Approach – to come near or nearer, as in space or time.
9. Disc – a thin, flat, circular object or plate.
10. Distance – the extent of space between two objects or places.
11. Turnover – rotation of a flying disc about the flight axis.
12. Tipping – control of a disc by finger contact with the flight plate.
13. Stalling – a defensive call in ultimate when the passer is taking too much time.
14. Stability – the property of a disc to maintain flight at the angle of release; the ability to resist turnover.
15. Edge – the bottom most portion of the rim of the disc.
16. Altitude – the angle of the disc with reference to the shoulder axis.
17. Bomb – a long downfield pass in ultimate.
18. Advance – to cause to move forward.
19. Accuracy – precision; exactness.
20. Eagle – hitting a target in disc golf in two throws under par.
21. Catching – to capture or seize.
22. Bend – a curve steep enough to have a pronounced peak.
23. Birdie – hitting a target in disc golf in one throw under par.
24. Bogey – hitting a target in disc golf in one throw over par.
Volleyball Unit

1. Volleyball - a game played by volleying an inflated ball over a net striking-to aim and usually deliver a blow, stroke, or thrust (as with the hand).
2. Modify - to make minor changes in.
4. Ace - a serve that is not passable and results immediately in a point.
5. Spike - also hit or attack. A ball contacted with force by a player on the offensive team who intends to terminate the ball on the opponent's floor or off the opponent's blocker.
6. Side out - occurs when the receiving team successfully puts the ball away against the serving team, or when the serving team commits an unforced error, and the receiving team thus gains the right to serve.
7. SET - the tactical skill in which a ball is directed to a point where a player can spike it into the opponent's court.
8. Rotation - the clockwise movement of players around the court and through the serving position following a side out.
9. Serve - one of the six basic skills; used to put the ball into play. It is the only skill controlled exclusively by one player.
10. Overhand pass - a pass executed with both hands open, controlled by the fingers and thumbs, played just above the forehead.
11. Overhand serve - serving the ball and striking it with the hand above the shoulder.
12. Forearm pass - join your arms from the elbows to the wrists and strike the ball with the fleshy part of your forearms in an underhand motion.
14. Volley - return of the ball before it touches the ground.
15. Underhand serve - a serve in which the ball is given a slight underhand toss from about waist high and then struck with the opposite closed fist in an "underhand pitching" motion.
16. Striking - to aim and usually deliver a blow, stroke, or thrust (as with the hand).
17. Catch - allowing the ball to come to rest on any body part of the body.
18. Carrying the ball - it is illegal to hold the ball.
19. Foot fault - to step on or over the endline before or during the serve.
20. Let serve - a served ball that touches the net on its way over the net.
21. Match - to win two of three or three of five games depending on the competitive level of play.
22. Point - awarded to a team for any infringement of the rules by the opponent or for an unreturned shot.
23. Switch - a change of playing positions on the court for strategic reasons.
24. Cover - being positioned behind a spike or a block to field a ball glancing off a team member.
APPENDIX I:
Literacy Scoring Rubric
### Literacy Rubrics

**Spelling**

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<td>Three, four or five of the sight words were spelled correctly.</td>
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<td>Less than three sight words were spelled correctly.</td>
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**Definitions of Sight Words**

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**Sentence Structure**

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</tr>
<tr>
<td>2</td>
<td>Three, four or five of the sight words were used correctly in a sentence.</td>
</tr>
<tr>
<td>1</td>
<td>Less than three sight words were used correctly in a sentence.</td>
</tr>
</tbody>
</table>