

Fundamental Movement, Peaceful Playgrounds, Dynamic PE and We Count Pedometer Program Descriptions for PEP Grants

PROGRAM DESCRIPTION

This project will rely on three programs to insure that students have access to and teachers have the skills to deliver a comprehensive physical education program that extends into recess, lunch and after school opportunities, to enable extended practice opportunities in motor, social skills practice, and opportunities for increasing children's physical activity. The three programs which combined address all six of the PEP program elements are: (1) Fundamental Movement Program; (2) Peaceful Playgrounds Program; (3) Play Hard, Eat Smart Nutrition Program ; and (4) Dynamic Physical Education.

The Fundamental Movement Program provides the resources necessary to guide classroom teachers in specific skill focus, including instruction in teaching strategies, sequential introduction of motor skills and movement knowledge enhanced by skills checklists and teaching cues.

The Peaceful Playgrounds program extends on the Fundamental Movement Program into recess and after school activities through the use of activity guides which list developmentally appropriate games, each with specific motor development skill identified and categorized for students (K – 6th) with grass games and activities. The continuity of the program and suggested timeline for implementation provide a pacing type calendar for instruction in the various activities. Having guides that enable teachers to offer developmentally appropriate skills will give them the opportunity for mastery and success, while monitoring progress toward State PE Standards. The Clark Motor Skills Inventory will be used to assess students motor skill development gains while using this program. Educating all teachers is a must so that all teachers have an understanding of the curriculum, its goals and objectives. The addition of the program will not only introduce students to new, challenging and fun activities, which are developmentally appropriate, but will also show them that physical education can be fun. Recess time can

be spent in appropriate physical activity that increases not only active time but also essential motor development skills. Some examples of games and activities which develop motor skills and enhance physical education instruction and carry into recess are the skipping track, gallop track, hopping and jumping grids designed to assist in the instruction of loco-motor skills, and painted targets for practicing hand-eye coordination activities to name a few. The new programs addressing nutrition and self-discipline have the possibility of changing student views in the direction of lifetime wellness standards.

This project requires the involvement of the total school community. Teachers deliver the instruction, parents and community members add the games and markings, students self regulate and learn to solve problems appropriately, and school administrator's budget equipment and continue funding for program success. School site food services personnel will assist with the Play Hard, Eat Smart nutrition program through supporting the cafeteria components of the program including charts and table cards reminding students of the nutrition messages included in the program. Parents and teachers also play a part in delivering the curriculum through the teachers Play Hard, Eat Smart resource kit. Parents receive an "at home" component of the program, which includes messages like "make family time active play". The sustainability of this program is evident by the district's commitment to retain elementary physical education teachers even in a time of dire financial constraints.

b. The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

The strategy of "changing the environment rather than changing the individual" has received much notice by researchers looking at an effective intervention for the ever growing trend toward childhood obesity. Changing the environment (adding markings), in addition to sequential instruction of skills, is strategy that brings about the changes needed in our current

program and will result in increased activity and quality of instruction for students. The new opportunities for participation, as opposed to watching, will promote healthy physical fitness life styles. To have change, the students must first be able to see the need for change. Though the use of pedometers, students will be able to record and see their own individual level of activity.

Teachers at all grade levels will benefit from a new curriculum and new program resources. Professional development is a priority to enable all teachers to understand the objectives of the program and “buy in” to the desired goals. All teachers will receive in-service training in the strategies contained in the new P.E. curriculum and California Physical Education Standards.

An understanding of the program will help all teachers in reinforcing activities and skills learned in the P.E. curriculum.

3. Quality of the Project Design

a. The extent to which the proposed activities constitute a coherent, sustained program of training in the filed. Professional development for all teachers will be provided.

Teachers will be required to take 15 hours of professional development concerning physical education and use their knowledge to advise and teach students on the importance of health and physical education. In addition, project coordinators will share conference information with teachers upon their return. The proposed plan will increase the district’s ability to help all students meet more challenging standards through the following program elements:

The use of the Fundamental Movement *Program* Grades K-2, the *Peaceful Playgrounds Program*, the *Dynamic PE Program* Grades 3-6, with *Play Hard, Eat Smart* will provide the basis for a comprehensive program that can be instituted in the classroom and carried over into recess periods. The We Count Pedometer Program will allow students to monitor their step counts and self assess their activity level.

Additionally, the pedometer has been shown in previous research studies (McKinzie 2000) to provide motivation for children to increase their activity through goal setting activities.

Proposed Program Design

Curriculum with Fitness Emphasis	Integrated Curriculum with Motor Skill Development and Wellness Instruction <ul style="list-style-type: none"> • Fundamental Movement Program • Dynamic Physical Education • Play Hard, Eat Smart Program
Teacher Training	Training Materials <ul style="list-style-type: none"> • Face to Face Training • On site coaching as needed • Involvement of all teachers
Equipment and Facilities	<ul style="list-style-type: none"> • Peaceful Playgrounds Equipment Package • Fundamental Movement Equipment Package • Dynamic PE Equipment Package 100 games and motor skills markings permanently available
Assessment	<ul style="list-style-type: none"> • Pedometers • Fitness Gram • Teacher Surveys • Clark Motor Skills Inventory

Student Activity, Fitness, Conflict Resolution and Nutrition

The Peaceful Playgrounds Program was selected as program elements include instruction in and assessment of children’s physical activity through the use of pedometers to monitor their activity levels pre and post implementation of adding designs to the PE and playground areas.

Student’s ability to monitor steps taken provides for them the ability and awareness for meeting this *California State Standard #3* and for achieving a healthy and active lifestyle. The Peaceful Playgrounds Program encourages movement in Physical Education through enriching the environment during P.E. class time and carries over into recess and after school opportunities for students to continue their increased activity level. (*PEP Program Element 1*)

The program uses games designed to emphasize various motor development skills and will allow students to increase daily time spent physically active. (*PEP Program Element 2*)

A study by British researchers at Liverpool University showed that playground markings alone increase the time children spend in active play and raise their daily energy expenditures by 20% (Stratton 2002). In Peaceful Playgrounds research study, 83% of elementary school principals using the program indicated an increase in children's activity level and game participation. (Beiswenger, Webster, Hogan and Vega, December, 2003).

The students receive instruction in a wide variety of developmentally appropriate games and activities that are cooperative, competitive and cognitive. (*PEP Program Element 4*) Learning activities encourage movement aiming for less standing in line and waiting for one's turn with a piece of equipment. The curriculum pacing timeline requires for a new game or activity to be taught daily with practice opportunities at the conclusion of the instruction and demonstration. (*PEP Program Element 6*)

The program provides for the visual patterning for reinforcing and enhancing instruction in fundamental movement through the use of skipping tracks, galloping tracks, hopping and jumping grids etc. Additional perceptual motor skills are enhanced through the use of the scattered circles in which students are instructed in body and space concepts. Bean Bag Toss Grids, Alphabet Grids and other markings provide opportunities for hand-eye coordination activities. (*PEP Program Element 2*)

Development of and instruction in cognitive concepts about motor skill and physical fitness is related to the support of a lifelong healthy lifestyle. (*PEP Program Element 3*)

The significance of developing fundamental movement skills in order to maximize the health and well being of young children has been highlighted in Australia, and internationally, in recent years. Proficiency in these foundations of movement

contributes to the health and well being of individuals enabling lifelong involvement in physical activity. (Dianne Kerr, Department of Education Western Australia).

The addition of permanent playground markings is one of the latest trends in physical education and one of the most respected strategies for increasing children's physical activity. The entire nation of Ireland is adding playground markings to all primary schools (K-5) as an intervention for the growing trend to increase children's physical activity and curb childhood obesity in that country. (Northeastern Health Board, Press Release Minister of State at the Department of Health and Children Ireland. October 2003).

Students will record steps taken in their physical education class period and recess period once a week. The students chart activity levels through recording steps taken when factored with time to move. *(PEP Program Element 1)*

Teachers

The Peaceful Playground Kit in conjunction with **Fundamental Movement** and Dynamic PE Programs are designed to assist teachers in planning and delivering programs **that support each pupil's development of proficient fundamental movement skills. The kits includes teacher training materials including: video, staff handouts, overhead transparencies, facilitator notes and a power point presentation walking staff through the various strategies for successful implementation of the program and making the training component available for a refresher as needed or when new staff members are hired. Additionally, the face to face training and follow up on-site coaching component insures various levels of support are available based on teacher need. (PEP Program Element 6)**

By conducting teacher workshops on the programs, teachers will understand the *Peaceful Playground Program* designs in tandem with the *Fundamental Movement Program* which will enhance children's motor skill development and

provide lesson structure and support for teachers. The use of *Fundament Movement Program Peaceful Playgrounds Programs* and *Dynamic PE* with their teacher and supervisor training manuals, together with the *Play Hard, Eat Smart Program* will provide the basis for a comprehensive program and clear objectives for professional development and curriculum update. (PEP Program Element 6)

Equipment

The *Peaceful Playground Program* equipment package, the **Fundamental Movement Program equipment package** and the *Dynamic PE* package are designed to provide the necessary equipment so that **100 games and activities are available with enough equipment and accessible equipment to insure active participation and reduce the time students “stand around” waiting to practice a motor skill. More equipment equals more practice time for more children, which leads to improved skills. (PEP Program Element 2)** Additionally, the opportunities to develop positive social and cooperative skills through physical activity participation are enhanced by an ample supply of equipment thus reducing PE class and playground confrontations from students getting frustrated by waiting for a turn. (PEP Program Element 4) The goal of the *Peaceful Playgrounds, Fundamental Movement* and *Dynamic PE* curriculums is to provide staff and students with a common language and set of behavior expectations that are part of the positive, safe environment in which students can enjoy learning.

Students will be able to use the pedometers as a means of self measurement of their activity levels. This will provide students the ability to assess their activities, acquire knowledge of body activity levels, and change toward a healthier life style. (PEP Program Element 1)

- b. The extent to which the design of the proposed project reflects up- to-date knowledge from research and effective practice.**

The *Dynamic PE* program, developed by Robert Pangrazzi from Arizona State, is one of the most utilized curriculums in the schools today. His over 200 professional publications attest to his current and respected position within the field of Physical Education.

The *Peaceful Playgrounds Program* has demonstrated and been recognized as a promising practice by various professional associations and educational groups – a further indication that systemic change has occurred in schools that have previously implemented the programs. The Golden Bell Awards program promotes excellence in education by recognizing outstanding programs in school districts. This award program contributes to the development and evaluation of curriculum, instruction and support services by “seeking out and recognizing sustainable, innovative or exemplary programs” which have been developed and successfully implemented by California teachers and administrators. This award was given to the elementary school for which the original *Peaceful Playground Program* research was conducted in 1999. *Peaceful Playgrounds* appears on New York City’s Sharing Success website of model programs within the state and numerous other organizations cite it as a recommended resource in the area of safety, conflict resolution, motor skills, and physical activity based on research results and proven results.

In a recently completed research project, 83% of principals reported seeing an increase in students using conflict resolution strategies, and 66% reported a decrease in playground confrontations. (Beiswenger, Webster, Hogan, and Vega. December, 2003).

Appropriateness

The *Dynamic PE Program*, developed by Robert Pangrazzi from Arizona State is one of the most utilized curriculums in the schools today. This program was selected to provide a comprehensive curriculum, which emphasizes fitness and healthy lifestyles, as was needed to fill the curriculum gap identified in the needs assessment data relating to multiple curriculums

and students out of healthy fitness zone in fitness testing. This program was selected for 3-6th grade students.

The *Peaceful Playgrounds Program* is best known for providing a safe environment for children to learn pro-social skills while engaged in physical activity. Curran Elementary, in California, won the state's prestigious Golden Bell Award as a model program which decreased playground injuries by 67% and an 86% decrease in office referral for playground confrontations. (National Safe Schools Magazine. October 1998). In addition to receiving instruction in cooperative play, problem solving strategies and conflict resolution options, students learn to play appropriately during physical education, recess, the classroom, home and community. This program was selected to achieve both the increased physical activity objective and the positive social and responsible behavior objectives, as identified in the needs assessment and bullying data.

***Fundamental Movement Program* follows the guidelines of developing the fundamental movement skills and has been tested in over 80 schools and shown to increase student's motor skills as determined by significantly increased scoring on the Clark Motor Skills Inventory. Additionally, the program received the highest commendations from a California Department of Education Program Review Team for "how children are learning and what children are learning" in the *Fundamental Movement Program*. The program was selected for K-2 students due to the emphasize on fundamental motor skill development and the need for a district wide curriculum and training program data from the needs assessment.**

With an expanded PE Curriculum and equipment, the SMITH Elementary School District feels the additional opportunities will excite and motivate more students and offer teachers and students a coordinated strategy for implementing the new physical education curriculum of fitness, skills and healthy lifestyle choices.

4. Quality of the Project Evaluation

- a. **The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.**

Project coordinators will work together to administer the evaluation plan. An advisory committee of classroom teachers, physical education specialists, representative administrators, and council PTA board members will be formed to help implement and evaluate the program. This committee will meet quarterly to review, evaluate, both positive and negative objective performances and intended outcomes of the program. If necessary, modifications will be made to meet intended outcomes. At the completion of the project, the advisory committee will do an overall evaluation which includes: a) meeting goals and objectives; b) instruments and methods of evaluation; c) collect necessary information and review data and determine that the impact, outcome and objectives were met; and, d) complete a year end final report meeting federal requirements.

The evaluation chart below outlines the use of objective performance measures that are directly correlated to the program goals and objectives. A complete list of the multifaceted data collection and performance indicators is provided in the chart. Data will include but not be restricted to: identification and recruitment activities; student fitness data, test results, teacher training surveys, activity schedules, pedometer data, Clark Motor Skills data, activity schedules, and equipment distribution logs.

SMITH's Current Program Practices and GAPs

CA Guidelines	Saugus Program
Instructional Periods total 200 min ea. 2 weeks	GAP: All grade levels current experience limited physical activity time in recess due to limited equipment and practice opportunities.
Qualified Physical	GAP: PE Specialists only offer 60 minutes a week. 40

Education Teachers providing developmentally appropriate instruction.	minutes per week of instruction may or may not be currently taught by classroom teacher.
Adequate Equipment	GAP: According to needs assessment teachers need additional supplies and equipment in order for increased student involvement.
Instruction in a variety of motor skills	GAP: Curriculum includes motor skills but limited (if any) instruction in lifelong fitness concepts or social emotional instruction.
Fitness and assessment	GAP: 30% of students are not currently in healthy fitness zone in Fitnessgram assessment.
Maximum practice opportunities for class activities	GAP: Lack of equipment limits opportunities for practice at all grade levels.
Out of school activities that support and reinforce physical activity.	GAP: Currently recess is not thought of as an opportunity to extend PE learning's and an opportunity to increase physical activity.
Assessment to monitor and reinforce student learning.	GAP: No current method for evaluating motor skills and progress toward state standards.

- b. **The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.**

Objective performance measures (fitness tests, Clark Motor Skills Inventory, attendance records, etc) will produce qualitative and quantitative data regarding the success of this project. The methods of the evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project. The objective performance measures of this project are presented below. The district will use physical education achievement toward state standards (Clark Motor Skills Inventory) and FitnessGram results for statistics to establish benchmarks for the goals of the project.

Performance Measures	Performance Outcomes	Data to be Collected
# 1 The percentage of students actively participating in PE activities will increase.	Increase by 5% the number of students who meet or exceed 6 fitness standards for their grade level.	District FitnessGram results May 2005.
	Increase by 10% the steps taken by students in physical activity including PE, recess and after school activity.	Pedometer readings monthly pre and post implementation of new curriculum, training and markings. Pre- Step counts in Oct. 2004 and Post step counts in May 2005.
	Increase motor skills markings and playground activity markings by 15%.	Playground marking assessment instrument recording markings pre and post.
	Decrease by 5% the number of students who fall outside of the recommended BMI score	District Fitnessgram results May 2005
	50% of classroom teachers will teach 40 minutes or more a week of PE.	Teacher lesson plans on physical education minutes scheduled.
# 2 Professional development and curriculum materials so that teachers receive training to instruct students in meeting state standards in P.E.	Increase pre and post test score by 25% indicating gain in student knowledge of nutrition and healthy eating, benefits of regular physical activity.	District constructed paper and pencil test constructed on Play Hard Eat Smart Program.
	Increase pre and post test score by 25% indicating teachers' knowledge and confidence in teaching concepts of nutrition and fitness and their ability to implement effective physical education practices as demonstrated by written survey.	Paper and Pencil survey regarding teacher confidence in teaching concepts in nutrition, fitness, and motor skills instruction necessary to instruct students in meeting State PE Standards.
	Recommended amount of specific equipment distributed to each school site to insure activity and instructional materials available.	Project data receipt of purchased equipment.

	70% of students will acquire skills toward State Standards in PE as demonstrated by students scoring in the 40-52 ranges on the Clark Motor Skills Inventory demonstrating acquisition of fundamental motor skills.	Student's results on Clark Motor Skills Inventory.
	80% of teachers to participate in 15 hours of professional development activities.	Sign in sheets at professional development activities.

4. Equipment		
<ul style="list-style-type: none"> • FUNDAMENTAL MOVEMENT Program \$1,200 per site 15/sites <ul style="list-style-type: none"> ○ Books, stencils, certificates, curriculum, skills checklists 	18,000	
<ul style="list-style-type: none"> • Fundamental Movement Equipment \$3300 per site 15 sites <ul style="list-style-type: none"> ○ Balance beams, balance, boards, jump ropes, playground balls, bean bags, parachute, scoops, yarn balls, Frisbees, kickballs, ring toss, Geometric shapes, ball cart, alpha tiles, number tiles, floor mats, lummi sticks, rhythm records. 	49,000	
<ul style="list-style-type: none"> • Dynamic PE Teacher Texts (1 per grade level 3,4 & 5th) = 4 time 15 sites = 60 text books times \$89 	5,340	
<ul style="list-style-type: none"> • Dynamic PE Lesson Plans each teacher grades 3-6= 12 time 15 sites= 180 teachers times \$36 per lesson plan book 	6,480	
<ul style="list-style-type: none"> • Dynamic PE Equipment Equipment Pack \$4765 /15 sites Dynamic Phy Ed Lesson Plans Book, Gopher Rainbow 8.5" P 	71,250	
<ul style="list-style-type: none"> • Peaceful Playgrounds Kit \$1200 / 15 sites <ul style="list-style-type: none"> ○ Curriculum, training kits, blueprints, certificates, stencils, rule book, and video 	\$18,000	
<ul style="list-style-type: none"> • Peaceful Playgrounds Equipment Packs \$2400 /15 sites Footballs, basketballs, volleyballs, jump ropes, hoops, ball carts, pennies, sidewalk chalk, bean bags, tetherballs, softballs, shuffleboard set, bases, rip tag flags, Frisbees, hula hoops, kick balls, soccerballs, cones and sof-bat and ball. 	\$36,000	
<ul style="list-style-type: none"> * Peaceful Playgrounds Instructional Games Videos 	\$7500	
<ul style="list-style-type: none"> * Pedometers and We Count Program 15 sites 	\$33,450	

5. Supplies <ul style="list-style-type: none"> • Paint, paint machine, rags, chalk line, measuring tape and supplies for painting markings \$250 / 15 sites 	3,750	
6. Contractual <ul style="list-style-type: none"> • Evaluation consultants 100hrs at \$50hr 5,000 • Stipend for site coordinator \$2000 / 15 sites 30,000 <ul style="list-style-type: none"> ○ One coordinator per site to inventory and receive equipment, schedule trainings and distribute information and evaluation information • Fundamental Movement Trainings \$1500 / 15 sites 22,500 <ul style="list-style-type: none"> ○ 2 half day trainings • Dynamic PE Trainings \$1500 /15 days 22,500 <ul style="list-style-type: none"> ○ 2 half day trainings • Peaceful Playgrounds Trainings \$1500/15 sites 22,500 <ul style="list-style-type: none"> ○ (1) 3 hour training per site and consulting 		
7. Construction		
8. Other		
9. Total Direct Costs		
10. Indirect Costs 5% of total		
11. Training stipends for teachers <ul style="list-style-type: none"> • Teachers will receive stipends for after school training or sub release time \$20hr/ 13 hours times /320 teachers 	83,200	