Final Evaluation Report: Elementary Physical Education in New Mexico

2006-07

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For:
New Mexico Public Education Department
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This report provides the results of the evaluation of the 2006-07 implementation of the New Mexico Public Education Department’s Elementary Physical Education Project in 33 elementary schools. This project was funded by a legislative appropriation for the 2006-07 school year. The goal of the program is to provide quality-level physical education for elementary school students that is taught by a PED-licensed physical education (PE) teacher. The 2006-07 evaluation followed a pre-test, posttest methodology, with data being collected twice during the year from physical education teachers and principals in grant schools at the beginning of the academic year, and then again in late May 2007. Highlights of the results of this evaluation are outlined in the box below:

### Executive Summary

**Highlights:**

- From baseline to post-intervention, principals in grant schools felt their elementary school students had slightly increased their level of physical activity. Physical education (PE) teachers’ rate their students as somewhat more active than the estimates of the principals.

- Although two-thirds of grant school principals felt students received more than one hour of physical education each week, only 39% of the PE teachers said their students received that amount of physical activity. In fact, 35% said their students only received 30 minutes to an hour per week, which is less than the standard recommended by the Centers for Disease Control and Prevention—that elementary school students should receive at least 150 minutes per week.

- Support levels for physical education classes, from all stakeholders (administrators, teachers, parents and students) are seen to be high; support from these people was felt to be even higher at post-intervention.

- Some challenges to implementing quality physical education programs include: lack of appropriate facilities, resources or personnel and scheduling problems with regard to time being allocated to more academic courses.

- More than a quarter (29%) of the principals said they cannot maintain the physical education program without PED funding; however, at least one-fourth (25%) felt that they would have some probability of keeping the program going.

- From baseline to post-intervention, greater numbers of principals felt that the physical education program would have a positive impact on students’ academic abilities and classroom behaviors. PE teachers held more conservative views on the ability of the physical education program to affect both these indicators, and although greater numbers felt the program would improve academic performance at post-intervention, fewer of them felt the classes would have any effect on classroom behaviors.

- Individual significant change case studies appear to indicate that physical education programs can have an impact on certain at-risk elementary students’ academics, behaviors, and health status.
This report provides the results of the evaluation of the 2006-07 implementation of the New Mexico Public Education Department’s Elementary Physical Education Project in 33 elementary schools. This project was funded by a legislative appropriation for the 2006-07 school year. The goal of the program is to provide quality-level physical education for elementary school students taught by a PED-licensed physical education (PE) teacher.

The 2006-07 evaluation followed a pre-test (baseline), posttest (post-intervention) methodology. Data was collected twice during the year from physical education teachers and principals in grant schools, once at the beginning of the academic year, and then again in late May 2007.

The two questionnaires collected self-report data on physical education teachers’ and principals’ views on:

- how physically active elementary school students were,
- how much time children spent in physical education class,
- how supportive school personnel and parents were of physical education,
- the types of challenges faced in implementing and maintaining physical education programs,
- whether physical education classes have any impact on academic performance and class behaviors, and
- whether schools would be able to continue offering physical education classes without the PED funding (see attachments for survey instruments).

The University of New Mexico, Center for Health Promotion and Disease Prevention evaluation team drafted the survey instruments, reviewed them with the PED Elementary Physical Education Project Officer, and made adaptations as per his suggestions. An orientation to the year’s evaluation procedures was provided to the PE teachers funded through the grant at the Fall 2006 Funded Partners Meeting; at that time, the survey instruments were distributed to the PE teachers to be administered in their schools and returned to the evaluation team by a specified date. The posttest survey instruments were slightly revised from the originals (based on the kind of responses received on the pre-test). In particular, in order to gain further insight into the question of whether physical education classes can contribute to a student’s overall well-being and/or academic performance, the PE teachers’ post-intervention questionnaire asked them to provide a “significant change” case study for one student in their classes. The significant change case study asked for qualitative information about: what the student’s problem or issue had been; what the PE class program did to help that student; what the outcome or result of the PE efforts had been; and what significance did those results hold for the student. This procedure has allowed the evaluation to blend a mix of quantitative and qualitative data to present to the PED.
Principals in grant schools completed a baseline and post-intervention survey that were similar in nature. Twenty-two principals completed the baseline survey and 24 responded to the posttest; 17 respondents were matched by school for both baseline and post-intervention surveys.

**Student Physical Activity**

Principals were asked to estimate how physically active their students (kindergarten through sixth grade) were, using a scale from 1 (not active at all) to 7 (extremely active). At baseline, the median response selected by all 22 principals was a “5,” indicating that they thought most of their elementary school students, across all grades, were somewhat more than moderately active. The average score, for all grades, was 5.33. At post-intervention, the median score selected by the 24 respondents was “6,” or “active,” except for sixth graders, who received a median score of “5.” The average score, for all grades, was 5.23. Table 1 shows the activity level most often selected for each grade level, at baseline and post-intervention.

Table 1: Activity Level* by Grade and Survey Period as Seen by Principals (Pre: N=22/Post: N=24)

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Baseline</th>
<th>Post-Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Activity Level Most Frequently Selected</td>
<td>Percent Selecting this Activity Level</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>5</td>
<td>40%</td>
</tr>
<tr>
<td>1st Grade</td>
<td>5</td>
<td>39%</td>
</tr>
<tr>
<td>2nd Grade</td>
<td>5</td>
<td>41%</td>
</tr>
<tr>
<td>3rd Grade</td>
<td>5, 6</td>
<td>35%</td>
</tr>
<tr>
<td>4th Grade</td>
<td>5</td>
<td>43%</td>
</tr>
<tr>
<td>5th Grade</td>
<td>5</td>
<td>44%</td>
</tr>
<tr>
<td>6th Grade</td>
<td>4, 6</td>
<td>25%</td>
</tr>
</tbody>
</table>

Key:
* 1=Not active at all
  2=Not very active
  3=Somewhat active
  4=Moderately active
  5=Somewhat more active
  6=Active
  7=Extremely active

All principals said that their schools’ students were getting physical education at both baseline and post-intervention periods. Given this, few gave reasons for why students might not receive physical education; of those who gave answers, 4-5% indicated that students might have a disability that excused them from physical activity, and 5% said that some students choose not to take physical education. In terms of the amount of time students spent receiving physical education, principals’ responses indicated some uncertainty. At baseline, most (41%) indicated that students received one or more hours of physical education in an average school week; 18%
said their students got 30 minutes to an hour each week. At post-intervention, 67% of the principals said their students received more than an hour of physical education in an average week, while 13% each said their students received from 30-45 minutes per week, or 45-60 minutes per week. According to the Centers for Disease Control and Prevention, *Physical Education Curriculum Analysis Tool* (2006), high quality physical education includes providing at least 150 minutes per week (approximately 30 minutes per day) for elementary school students; it appears that at least one-third of the principals surveyed felt their students were getting less than this much time.

**Support for and Challenges to Physical Education**

Overall, at both survey times principals felt that support from teachers, parents and students for a physical education program was strong. They did feel that support increased from baseline to post-intervention (see Table 2).

Table 2: Level of Support for Physical Education as Perceived by Principals (N=22/24)

<table>
<thead>
<tr>
<th>Type of Supporter</th>
<th>Percent Very to Extremely Supportive (Baseline)</th>
<th>Percent Very to Extremely Supportive (Post-Intervention)</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>86%</td>
<td>96%</td>
<td>10%</td>
</tr>
<tr>
<td>Parents</td>
<td>86%</td>
<td>92%</td>
<td>6%</td>
</tr>
<tr>
<td>Students</td>
<td>90%</td>
<td>96%</td>
<td>6%</td>
</tr>
</tbody>
</table>

In terms of challenges faced in implementing and maintaining a quality physical education program, principals listed the following:

- a lack of appropriate facilities or resources (such as a gym),
- academic factors (such as use of the time allocated to physical education for other classes)
- time constraints within the academic schedule, and
- personnel issues (finding high quality physical education teachers, new teachers with a lack of experience).

At baseline, one-third (33.3%) of the principals felt that the physical education program would result, during the year, in academic performance improvement of some kind; 17% felt it would bring about students’ improved fitness and health, both mental and physical; and 11% each felt it would have a generally positive impact or increased enjoyment on the students’ part. By post-intervention, most of the principals were *not* strongly confident that without the PED funding for this program, their school would be able to continue providing physical education by maintaining the PE teacher position (see Figure 1).
Perceived Impact of the Program

Principals reported on whether or not they felt the physical education program would have any effect on students’ academic performance or classroom behaviors at baseline. At post-intervention, they indicated whether they thought the program would affect those same indicators, as well as student fitness and enjoyment. Table 3 presents these results.

Table 3: Principals’ Perception of PE Program Impact on Other Student Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Baseline</th>
<th>Post-Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Academic Improvement</td>
<td>73%</td>
<td>9%</td>
</tr>
<tr>
<td>Behavioral Improvement</td>
<td>82%</td>
<td>14%</td>
</tr>
<tr>
<td>Student Fitness*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Enjoyment/Support of PE*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

* These two indicators (student fitness and student enjoyment) were not measured in the baseline survey.

It appears that principals’ expectations of the physical education programs were high to begin with, and that they felt, after a year, that the impact of the programs were even greater than expectations.
Elementary Physical Education Program Evaluation
Final Evaluation Report (2006-07)

Results: Physical Education Teachers Surveys

The physical education (PE) teachers completed baseline and post-intervention surveys that were similar in nature. Twenty-five PE teachers completed the baseline survey, and 24 responded to the post-intervention one; 20 respondents were matched by school for both surveys.

Student Physical Activity

Overall, at both periods, the PE teachers rated their students, in all grade levels, as having a slightly higher level of physical activity than the principals’ ratings. The median score (or the score most often cited) given for kindergarten through fifth grade students was “6,” or “active.” Sixth graders received a median score of “5,” or “somewhat more active.” The average ranking for all grades was essentially the same: 5.31 at baseline, and 5.53 at post-intervention. Interestingly, PE teachers seem to have felt that the average level of activity among their students tended to improve over the school year, except among sixth graders, whose activity level decreased (no reasons given). Table 4 shows the activity level most often selected by PE teachers for each grade level.

Table 4: Activity Level by Grade and Survey Period, Seen by PE Teachers (Pre: N=25/Post: N=24)

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Baseline</th>
<th>Post-Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Activity Level Most Frequently Selected</td>
<td>Percent Selecting this Activity Level</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>6,7</td>
<td>57%</td>
</tr>
<tr>
<td>1st Grade</td>
<td>5</td>
<td>35%</td>
</tr>
<tr>
<td>2nd Grade</td>
<td>5,6</td>
<td>59%</td>
</tr>
<tr>
<td>3rd Grade</td>
<td>6</td>
<td>31%</td>
</tr>
<tr>
<td>4th Grade</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>5th Grade</td>
<td>6</td>
<td>43%</td>
</tr>
<tr>
<td>6th Grade</td>
<td>6</td>
<td>39%</td>
</tr>
</tbody>
</table>

Key:
- 1=Not active at all
- 2=Not very active
- 3=Somewhat active
- 4=Moderately active
- 5=Somewhat more active
- 6=Active
- 7=Extremely active
PE teachers also differed from the principals in their perception of how many students received physical education classes. At baseline, 88% of the PE teachers estimated that all students received physical education; by post-intervention, a greater number (96%) said this was true. Reasons students did not receive physical education, from the PE teachers’ point of view included: academic reasons (needing to study), personal reasons and choosing not to take the class. In the beginning of the school year, most (46%) PE teachers said that their students received one to two hours of physical education in an average week. By post-intervention, only 39% of the PE teachers said their students received more than an hour per week, and 35% said their students only received 30 minutes to an hour per week. This amount of time falls below the standard stated by the Centers for Disease Control and Prevention—that elementary school students should receive at least 150 minutes per week—and is also less optimistic than the perceptions of the principals.

Support for and Challenges to Physical Education

Like the principals, the PE teachers said that, in general, support from teachers, parents and students for a physical education program was strong. They also felt that administrators were supportive. For all stakeholders, the PE teachers felt the level of support increased from baseline to post-intervention (see Table 5).

Table 5: Level of Support for Physical Education as Perceived by PE Teachers (N=22/24)

<table>
<thead>
<tr>
<th>Type of Supporter</th>
<th>Percent Very to Extremely Supportive (Baseline)</th>
<th>Percent Very to Extremely Supportive (Post-Intervention)</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Teachers</td>
<td>67%</td>
<td>88%</td>
<td>21%</td>
</tr>
<tr>
<td>Parents</td>
<td>63%</td>
<td>88%</td>
<td>25%</td>
</tr>
<tr>
<td>Students</td>
<td>96%</td>
<td>100%</td>
<td>4%</td>
</tr>
<tr>
<td>School Administrators</td>
<td>67%*</td>
<td>83%</td>
<td>16%</td>
</tr>
</tbody>
</table>

* It is interesting to note that at baseline, almost one-quarter of the PE teachers (21%) felt that school administrators were providing little or no support for the physical education program. None of them expressed this at the post-intervention time.

The PE teachers, like the principals, noted that they did face certain challenges in implementing and maintaining their physical education programs. Among the challenges they faced were:

- a lack of appropriate personnel, space and resources for the program,
- scheduling problems and/or conflicts with academic issues, and
- students who lacked interest in or show did not like physical education classes.

Perceived Impact of the Program

PE teachers were somewhat more split than the principals had been in terms of their perceptions of the effect the physical education classes would have on other student indicators. For instance, at the beginning of the school year they were almost evenly split between those who felt the class
could improve students’ academic performance (58%) and those who did not believe it would (42%). On the post-intervention survey, however, like the principals, a greater percent felt that the program would have an effect on other indicators (see Table 6).

Table 6: PE Teachers’ Perception of PE Program Impact on Other Student Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Baseline</th>
<th>Post-Intervention</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Academic Improvement</td>
<td>58%</td>
<td>42%</td>
<td>65%</td>
</tr>
<tr>
<td>Behavioral Improvement</td>
<td>75%</td>
<td>25%</td>
<td>65%</td>
</tr>
<tr>
<td>Student Fitness*</td>
<td>96%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Student Enjoyment/Support of PE*</td>
<td>100%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>83%</td>
<td>17%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* These two indicators (student fitness and student enjoyment) were not measured in the baseline survey.

It is interesting to note that the PE teachers’ expectations of the impact of the physical education program on academic and behavioral indicators seem more conservative than those of the principals. In addition, they appear to have lowered their expectations of how much the classes could affect students’ behavior in other academic classes by the follow-up period, dropping from a positive expectation of 75% at the baseline period to 65% at post-intervention.

As noted in the evaluation methodology section, the PE teachers were asked during the post-intervention survey to provide a “significant change” case study for one student who had participated in their physical education class. A significant change case study gives qualitative information about: what a particular student’s problem or issue might be; what and how the physical education class program did to help that student; what the outcome or result of the physical education program had been with regard to that student; and what the significance of these results is. Although one case study might not provide generalizable data, an accumulation of these case studies from each of the grant school sites does help provide insight into the question of whether physical education classes can contribute to students’ overall well-being and/or academic performance. The significant change case studies for all the Elementary Physical Education grant schools are presented below in Table 7.
<table>
<thead>
<tr>
<th>Grant Site</th>
<th>Issue/Problem</th>
<th>Method of Addressing Issue</th>
<th>Client Outcome</th>
<th>Significance of Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrey Elementary</td>
<td>A special needs student had very few motor skills and weak leg muscles that required he work constantly at stretching and exercising his legs to relieve and prevent muscle shrinkage. He also had dependency issues and very few verbal skills.</td>
<td>The PE program has provided the student with a rigorous workout time. The program has allowed him to be more active, gain strength in his legs, improve his balance, and his motor skills are better defined.</td>
<td>The student looks forward to the PE program every day, and has found it to be an outlet not only for meeting his physical needs, but to become more independent. He once walked with difficulty; now he runs with confidence.</td>
<td>This student has improved not only in his physical abilities, but also in academics. He has become more independent and more well rounded in all aspects of academics and physical activities. He is improving his social skills, and appreciates extra-curricular activities.</td>
</tr>
<tr>
<td>Chama Elementary</td>
<td>There was determined to be a general lack of good nutrition and physical activity among K-5th graders.</td>
<td>Program focused on building cardiovascular strength and endurance among the students.</td>
<td>The program has helped students become more active and cautious of their nutrition. Cardiovascular strength and endurance among students has increased.</td>
<td>Students have a better understanding of the benefits of exercise and have established a foundation for a healthy lifestyle.</td>
</tr>
<tr>
<td>Coyote Elementary</td>
<td>Presented with student who was not active and acted out in class.</td>
<td>Student participates in daily conditioning and strength exercises, as well as games in PE.</td>
<td>By gaining strength, the student has been motivated to do more activities outside of PE, is physically stronger and more active.</td>
<td>Student has been better behaved in class.</td>
</tr>
<tr>
<td>Dexter Consolidated</td>
<td>A student in the PE class was experiencing some behavioral problems.</td>
<td>The program allows the student to engage in physical activity and release energy through exercise. Student has also learned that actions have consequences; if he misbehaves in class, he loses PE, which he enjoys.</td>
<td>Though the problem has not been completely eliminated, student has made major improvements and he isn’t in trouble as much in his classes.</td>
<td>The student does less misbehaving in class; his outbursts have been minimized. Both he and his classmates are experiencing fewer class distractions to their academic work.</td>
</tr>
<tr>
<td>Eddy Elementary</td>
<td>A student was failing school because he “chose” to be bad, to not follow the rules, or to participate.</td>
<td>Physical education teacher worked with the special education teacher to find incentives for the student and decrease his stress in physical education class, as he did not respond to discipline procedures in that class.</td>
<td>Due to the incentives and stress reduction measures, the student now participates in class and tries to follow the rules.</td>
<td>The student is “on task” now about 80% of the time, and is positively excited when he receives gold points in the physical education class.</td>
</tr>
<tr>
<td>El Dorado Elementary</td>
<td>Presented with a 4th grade student who had a lot of family problems at home. Although he did well in PE, he was not doing well in his other classes.</td>
<td>Though they did not like to do it, PE class was withheld from the student until he improved. This was done because nothing else was working, and PE was the only class in which he was putting forth effort.</td>
<td>Because he wanted to return to the PE class, the student began changing his work habits and attitude.</td>
<td>Student is doing better in school and having fewer behavioral problems. Student has also been given extra responsibilities in PE, such as taking down the tetherballs, which makes him feel more important.</td>
</tr>
<tr>
<td>Gallina Elementary</td>
<td>Presented with a student who had constant behavior problems in class.</td>
<td>Program provided student the opportunity to be active and let out extra energy.</td>
<td>Student learned to follow rules and play safely. Student’s behavior improved.</td>
<td>Student is now less of a discipline problem and is less distracting to others in class.</td>
</tr>
<tr>
<td>Grant Site</td>
<td>Issue/Problem</td>
<td>Method of Addressing Issue</td>
<td>Client Outcome</td>
<td>Significance of Outcome</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hurley Elementary</td>
<td>Program presented with an extremely hyperactive student who could not “sit still.”</td>
<td>Student was given extra assignments in PE to help increase his attention span and physical activity level.</td>
<td>Student was able to better focus on his work and was very motivated to come to the PE class.</td>
<td>The student has begun to increase his academic scores, and the other students in his class have been able to work better due to his acting out less in class.</td>
</tr>
<tr>
<td>Legion Park</td>
<td>Program presented with a young girl who was withdrawn and shy but who argued with classmates. Despite being athletic and coordinated, she was a poor sport, did not enjoy physical activity that involved cooperation, and did not participate in activities in/out of school.</td>
<td>She has excelled in the program's PE activities and has learned to cooperate with others, along with an increase in self-esteem.</td>
<td>Student’s increase in self-esteem and confidence has helped to improve her attitude towards her classmates and her teachers.</td>
<td>Student’s increase in confidence has improved her attitude toward class work and she strives to achieve in several academic areas.</td>
</tr>
<tr>
<td>Lybrook</td>
<td>Program presented with two male students who were getting into fights with each other.</td>
<td>Students were lectured about teamwork, then placed on the same team in PE class.</td>
<td>Through their PE teamwork, students have become friends and are now always together.</td>
<td>Both students are no longer fighting and acting out. Instead, they are doing their class work and succeeding in academic work.</td>
</tr>
<tr>
<td>Mike Mateo</td>
<td>(See case study for Legion Park)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monterrey</td>
<td>Presented with a student who was failing because he could not express his anger in an appropriate manner.</td>
<td>Student was monitored closely in PE and was allowed to run laps, do push-ups or sit ups whenever he became angry.</td>
<td>The outcome has been positive, particularly since the student has been allowed to perform some of these activities (sit-ups, push-ups) in the classroom so that he could vent anger and/or frustration in an appropriate manner.</td>
<td>Student is no longer considered a threat to other students in PE. His behavior on the playground has improved and he is able to participate in cooperative activities.</td>
</tr>
<tr>
<td>Parkview</td>
<td>Program presented with several students who had attendance problems.</td>
<td>PE program implemented a before-school Marathon Club in which students could participate (run) and earn rewards.</td>
<td>Students participating in the Marathon Club improved their attendance at school.</td>
<td>Improved attendance can lead to improved learning.</td>
</tr>
<tr>
<td>Paul D. Henry</td>
<td>(See case study for Legion Park)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rio Gallinas</td>
<td>Program identified a need for increased opportunities for student participation in sequentially structured physical education mini-breaks in the daily context of academics and class.</td>
<td>Teachers were trained to implement a progression of juggling activities into their lesson plans throughout the day with students (from the Brain Dance program). Teachers received lesson plans and students got juggling equipment.</td>
<td>Students has structured physical activity throughout the day with mini-juggling breaks. Students have thus improved areas of gross and fine motor skills, as well as increased their academic performance—especially in reading and group interaction behaviors.</td>
<td>Program has found a successful means of integrating structured student physical activity into a very full, tightly scheduled classroom routine. Students have increased opportunity for physical activity (that also helps enhance learning), and teachers have a “fun” tool to use daily.</td>
</tr>
<tr>
<td>Grant Site</td>
<td>Issue/Problem</td>
<td>Method of Addressing Issue</td>
<td>Client Outcome</td>
<td>Significance of Outcome</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Roosevelt</td>
<td>Program presented with teachers who used the PE class as a reward or punishment for students who acted out in their classrooms.</td>
<td>PE teacher worked with the classroom teachers to decide what was most appropriate action for each student.</td>
<td>As none of the students wished to miss the physical education class, they all complied with teacher instructions, and occurrences of acting out declined.</td>
<td>System has apparently helped the students continue to get PE, while also complying with other teachers’ expectations of them in class.</td>
</tr>
<tr>
<td>Ruth N. Bond</td>
<td>Students needed to be able to apply what they learn in physical education class to a variety of activities in their lives.</td>
<td>Through the physical education class, students were prepared for climbing, learning that the muscles they work during exercise are the same used in climbing or for other “fun” activities. Students were able to participate in an annual climbing field trip and rope climbing.</td>
<td>84% of the student population attended the class, learning rope climbing, bouldering, physical education safety, and how to use the equipment. Students saw adult role models working out; parents helped supervise classes. Students have asked when they can do the trip again.</td>
<td>Parents are considering memberships and putting groups together to climb on their own. Students received multi-disciplinary learning—physics, math and writing skills to communicate the physical education activity. They’ve experienced positive adult role models participating in physical activity.</td>
</tr>
<tr>
<td>San Diego Riverside</td>
<td>One particular student was overweight and did not like to participate in PE.</td>
<td>Program put the student on an exercise routine that included walking and stretching.</td>
<td>Student lost 6 lbs. and felt better about moving and participating in the PE activities.</td>
<td>Student is also more alert in class and is doing better in both the PE class and the academic program.</td>
</tr>
<tr>
<td>San Lorenzo</td>
<td>Presented with a student who was inattentive in class and missing assignments.</td>
<td>After participating in PE classes, which allowed the student to relieve stress, the student was calmer and ready to work.</td>
<td>Student is working better in class, is happier, and is getting along better with classmates.</td>
<td>Student is doing better at turning in class assignments and is feeling better about himself.</td>
</tr>
<tr>
<td>Sierra Vista</td>
<td>(See case study for Legion Park)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest Primary Learning Center</td>
<td>Presented with several students who were introverted, shy and afraid to “let loose” and try new things.</td>
<td>One activity to help these students has been the sportsmanship award that is given out weekly by the program; it is based on character. A deserving student is given one, as well as positive feedback in front of the class.</td>
<td>Students have experienced a positive change in attitudes; they have “come out of their shells,” and increased their desire to participate fully and be more at the center of all PE activities. They are enjoying a high level of success that they had not experienced before.</td>
<td>These students have realized that success is more easily obtained in all aspects of life when there is an increase in their confidence, desire and acceptance.</td>
</tr>
<tr>
<td>Tatum</td>
<td>Presented with student who had issues with being respectful, especially to authority</td>
<td>Activity in PE helped student work in groups and be more respectful. Student took responsibility for own actions in class and to handle authority better.</td>
<td>Student’s overall attitude to school improved, as well as in his dealings with teachers.</td>
<td>Student not only learned about personal fitness but also life skills and character in PE. Student has improved and in doing so, improved the class atmosphere.</td>
</tr>
<tr>
<td>Grant Site</td>
<td>Issue/Problem</td>
<td>Method of Addressing Issue</td>
<td>Client Outcome</td>
<td>Significance of Outcome</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Texico</td>
<td>Presented with kindergarten student lacking in basic locomotor skills (skipping, hopping) and who had a very low physical fitness level.</td>
<td>Program provided daily practice in these loco-motor skills in games, competitions and play.</td>
<td>Student has achieved a better fitness level, in both strength and cardiovascular areas, and has passed achievement in each of the above locomotor skills. Student has gained a positive self-image and sense of accomplishment, as reflected in his attitude and personality.</td>
<td>Student’s physical conditioning continues to improve. His self-confidence and accomplishments in PE have translated into better attention, behavior and academic performance in his other classes.</td>
</tr>
<tr>
<td>Mesa Elementary</td>
<td>Student had an original IEP stating he was to be excused from PE due to physical limitations. Student would come and watch PE but never participate.</td>
<td>Another IEP meeting concluded the student’s physical limitations allowed him to participate in PE class. He began participating and becoming more active, reporting that he had fun in PE and liked participating in games.</td>
<td>Student, in time, joined the baseball team. Although he did not continue with this due to being self-conscious of his weight, he did indicate that he enjoyed it and had fun.</td>
<td>By experiencing and participating in different physical activity types without a fear of being “cut” from a team, student’s self confidence improved. He was also better able to “fit in” to his classes because of his greater involvement and participation in activities.</td>
</tr>
</tbody>
</table>

* No case studies received from: College Lane, Cuba, Edison, Katherine Gallegos, Los Ninos, Magdalena, Mettie Jordan, Roy Municipal, and Tierra Amarilla schools.
Discussion

Given the limited availability of resources for the evaluation of the Elementary Physical Education Program, the emphasis in this phase of the evaluation was on gaining the perceptions of two key stakeholders, grant school principals and the participating physical education teachers. As both groups of participants had a “stake” in the outcomes of this project, their views were sought in terms of determining whether elementary school students became more physically active during the program, how much time was allocated to physical education, how supportive other personnel, including parents were, what kinds of barriers must be overcome to maintain a quality physical education program, and whether physical education classes can positively affect other student indicators, such as academic performance and classroom behavior.

Results from both groups of survey participants, from the first, or baseline survey, to the post-intervention phase, indicate that elementary students involved in this program have become more physically active, although moderately so, and that all stakeholders—other teachers, administrators, family members and the students themselves—appreciate the value of physical activity and support the physical education classes. Physical education teachers, more so than the principals, appear to be less sure about whether increased physical education can have a major impact on improving students’ academic performance and/or classroom behaviors. Even with this viewpoint, almost all these teachers were able to relate at least one case study in which an at-risk student (socially, behaviorally, academically or in terms of health) was helped through participation in the physical education program.

This evaluation identified two areas of concern. One is the uncertainty expressed in terms of the overall amount of time per week that elementary school students receive physical education. The Centers for Disease Control and Prevention have recommended that elementary school students should receive at least 150 minutes of physical activity per week, an average of approximately a half hour per day. From the principals’ and PE teachers’ responses, it is not clear that many of the grant schools are actually providing this amount of time for physical education class. Another issue is that, although principals and others appear to be extremely supportive of having a physical education program, and see the benefits of physical activity, only 33% of them actually said there was a moderate to extreme probability that they could continue to provide physical education classes, or pay a PE teacher without having the monetary support of the PED Elementary Physical Education Program. This seems to indicate that without that funding, many of these programs may cease to exist.

Finally, the UNM evaluation team will consider whether school-level outcome indicators—annual yearly progress and attendance/truancy rates—have been positively affected by the presence of this program in the grant schools. As these indicators will not be available from the PED until late August, the evaluation team will provide a separate report concerning the comparison of those measures at that time to the PED Project Officer.
Elementary Physical Education Program Survey

School name: ______________________________ Today’s date: _________________________

The following survey is part of the required evaluation of the Elementary Physical Education Program in New Mexico. Please complete the following questions to the best of your ability and return the completed forms to the Elementary Physical Education Teacher in your school by __.

1. On average, and on a scale of 1 to 7, how physically active do you feel the students in your school are?

- Kindergarten
  - Not active at all
  - Moderately
  - Extremely active
- 1st graders
  - Not active at all
  - Moderately
  - Extremely active
- 2nd graders
  - Not active at all
  - Moderately
  - Extremely active
- 3rd graders
  - Not active at all
  - Moderately
  - Extremely active
- 4th graders
  - Not active at all
  - Moderately
  - Extremely active
- 5th graders
  - Not active at all
  - Moderately
  - Extremely active
- 6th graders
  - Not active at all
  - Moderately
  - Extremely active

2. Are all students in your school receiving physical education or getting physical activity?
   - Yes
   - No
   - Not sure

3. For those students not receiving physical education, what is/are the reason(s) they do not receive it?

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

4. For students receiving physical education, about how many minutes of physical education do they get now:
   - a) each day?_____
   - b) each week? ______

5. a) What does your school do to provide regular physical education to students?

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

   b) How supportive do you feel each of the following are towards having regular physical education for your students?

   Not supportive at all
   - Teachers
     - b1. Teachers
   - Parents
     - b2. Parents
   - Students
     - b3. Students

   Moderately
   - Teachers
     - b1. Teachers
   - Parents
     - b2. Parents
   - Students
     - b3. Students

   Extremely supportive
   - Teachers
     - b1. Teachers
   - Parents
     - b2. Parents
   - Students
     - b3. Students

6. a) Have you encountered any challenges in instituting a new physical education component in your school?
If yes, what challenges or barriers have you encountered?

______________________________________________________________________________
______________________________________________________________________________

7. What impact, if any, do you feel the physical education program has had at your school in the:
   a) last few weeks or months? ________________________________________________
   b) last year? _______________________________________________________________

8. On a scale of 1 to 7, how probable is it that—if this grant and its funding were not continued after
   this year—your school and/or the school district would be able to continue providing physical
   education by funding/sustaining the physical education teacher position? (Circle just one response.)

<table>
<thead>
<tr>
<th>Not at all probable</th>
<th>Moderately possible</th>
<th>Extremely probable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Since the physical education program began, have you noticed or recorded any improvements or
   positive changes in:
   a) student academic performance?  [ ] Yes  [ ] No  [ ] Not sure
   b) student classroom behavior?    [ ] Yes  [ ] No  [ ] Not sure
   c) other: _____________________?  [ ] Yes  [ ] No  [ ] Not sure

Thank you for your responses. Put your completed form in the envelope provided, seal it, and give
it to the Elementary Physical Education Teacher in your school by ____________.

Elementary Physical Education Teacher: Please send all completed forms in the envelope provided to:

Christine Hollis
PED Evaluation Team
University of New Mexico
Center for Health Promotion
1 University of New Mexico
MSC11 6145
Albuquerque, NM  87131
Elementary Physical Education Program Evaluation
Final Evaluation Report (2006-07)

Elementary Physical Education Program Survey

School name: ______________________________ Today’s date: _________________________

The following survey is part of the required evaluation of the Elementary Physical Education Program in New Mexico. Please complete the following questions to the best of your ability and return the completed forms to the New Mexico Public Education Department by _______________. Please circle or check the ONE best answer for each question.

2. On average, and on a scale of 1 to 7, how physically active do you feel the students in your school are?

<table>
<thead>
<tr>
<th></th>
<th>Not active at all</th>
<th>Moderately</th>
<th>Extremely active</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Kindergarten</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) 1st graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 2nd graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) 3rd graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) 4th graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) 5th graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) 6th graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Are all students in your school receiving physical education or getting physical activity?

☐ Yes  ☐ No  ☐ Not sure

4 For those students not receiving physical education, what is/are the reason(s) they do not receive it?
____________________________________________________________________________________
____________________________________________________________________________________

4. For students receiving physical education, how many minutes of physical education do they get in an average week? ______

5. How supportive do you feel each of the following are towards having regular physical education for your students?

<table>
<thead>
<tr>
<th></th>
<th>No support at all</th>
<th>Moderately</th>
<th>Extremely supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Administrators</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Parents</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Students</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Teachers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.a) Have you encountered any challenges in instituting a new physical education component in your school?

☐ Yes  ☐ No  ☐ Not sure

b) If yes, what challenges or barriers have you encountered?
____________________________________________________________________________________
____________________________________________________________________________________
7. Since the physical education program began, have you noticed or recorded any improvements or positive changes in:

   a) student academic performance?  □ Yes □ No □ Not sure
   b) student classroom behavior?    □ Yes □ No □ Not sure
   c) student fitness and/or awareness of fitness? □ Yes □ No □ Not sure
   d) student enjoyment of/support for PE? □ Yes □ No □ Not sure
   e) other: _________________________? □ Yes □ No □ Not sure

8. Briefly describe, using the questions below, one “success” story your program has achieved this year that shows the effect a physical education program can have on your students or family members. (Please print/write clearly.)

   a) Briefly describe the client’s (student or family member) problem or issue. 
      (Example: the student was failing because he physically acted out in class)

   b) Briefly explain what your program did to help this client. (Example: Student was put in very active PE class allowing him to work off basic frustrations and “steam.”)

   c) What was the outcome or result of your program’s efforts with this client? What did your client get out of the experience? (Example: student did less acting out in class; payed more attention to work)

   d) What is the major significance of these results? Why was this “success” important? (Example: student having fewer behavioral problems in class and doing better on classwork.)

Thank you for your responses. Put your completed form in the envelope provided, seal it, and give it to the Elementary Physical Education teacher to send to the following person/address by ____________.

Christine Hollis
PED Evaluation Team
University of New Mexico
Center for Health Promotion
1 University of New Mexico
MSC11 6145
Albuquerque, NM  87131
Elementary Physical Education Program Post-Survey

School name: ______________________________ Today’s date: _________________________

The following survey is part of the required evaluation of the Elementary Physical Education Program in New Mexico. Please complete the following questions to the best of your ability and return the completed forms to the Elementary Physical Education Teacher in your school by 4/27/07.

1. On average, and on a scale of 1 to 7, how physically active do you feel the students in your school are?

<table>
<thead>
<tr>
<th>Grade</th>
<th>Not active at all</th>
<th>Moderately</th>
<th>Extremely active</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Kindergarten</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) 1st graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 2nd graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) 3rd graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) 4th graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) 5th graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) 6th graders</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Are all students in your school receiving physical education or getting physical activity?
   - [ ] Yes  [ ] No  [ ] Not sure

3. For those students not receiving physical education, what is/are the reason(s) they do not receive it?
   - ______________________________________________________
   - ______________________________________________________
   - ______________________________________________________

4. For students receiving physical education, about how many minutes of physical education do they get in an average week? _______

5. How supportive do you feel each of the following are towards having regular physical education for your students?

<table>
<thead>
<tr>
<th>Supportive</th>
<th>Not supportive at all</th>
<th>Moderately</th>
<th>Extremely supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>b1. Teachers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b2. Parents</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b3. Students</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.a) Have you encountered any challenges this school year in instituting a new physical education component in your school?
   - [ ] Yes  [ ] No  [ ] Not sure

   b) If yes, what challenges or barriers have you encountered?

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

Turn over and continue ➔
7. On a scale of 1 to 7, how probable is it that—if this grant and its funding were not continued after this year—your school and/or the school district would be able to continue providing physical education by funding/sustaining the physical education teacher position? (Circle just one response.)

Not at all probable  Moderately possible  Extremely probable

1  2  3  4  5  6  7

8. Since the physical education program began, have you noticed or recorded any improvements or positive changes in:

a) student academic performance?  □ Yes  □ No  □ Not sure
b) student classroom behavior?   □ Yes  □ No  □ Not sure
c) student fitness and/or awareness of fitness?  □ Yes  □ No  □ Not sure
d) student enjoyment of/support for PE?  □ Yes  □ No  □ Not sure
e) other: _________________________?  □ Yes  □ No  □ Not sure

Thank you for your responses. Put your completed form in the envelope provided, seal it, and give it to the Elementary Physical Education Teacher in your school by ____________.

Elementary Physical Education Teacher: Please send all completed forms in the envelope provided to:

Christine Hollis
PED Evaluation Team
University of New Mexico
Center for Health Promotion
1 University of New Mexico
MSC11 6145
Albuquerque, NM  87131
Elementary Physical Education Program Post-Survey

School name: ______________________________  Today’s date: _________________________

The following survey is part of the required evaluation of the Elementary Physical Education Program in New Mexico. Please complete the following questions to the best of your ability and return the completed forms to the UNM evaluators (address below) by 5/4/07. Please circle or check the ONE best answer for each question.

1. On average, and on a scale of 1 to 7, how physically active do you feel the students in your school are?

   a) Kindergarten: 1 2 3 4 5 6 7
   b) 1st graders: 1 2 3 4 5 6 7
   c) 2nd graders: 1 2 3 4 5 6 7
   d) 3rd graders: 1 2 3 4 5 6 7
   e) 4th graders: 1 2 3 4 5 6 7
   f) 5th graders: 1 2 3 4 5 6 7
   g) 6th graders: 1 2 3 4 5 6 7

2. Are all students in your school receiving physical education or getting physical activity?

   ☐ Yes  ☐ No  ☐ Not sure

3. For those students not receiving physical education, what is/are the reason(s) they do not receive it?

   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________

4. For students receiving physical education, how many minutes of physical education do they get in an average week? _____

5. How supportive do you feel each of the following are towards having regular physical education for your students?

   No support at all  Moderately  Extremely supportive

   a. Administrators: 1 2 3 4 5 6 7
   b. Parents: 1 2 3 4 5 6 7
   c. Students: 1 2 3 4 5 6 7
   d. Teachers: 1 2 3 4 5 6 7

6. a) Have you encountered any challenges in instituting a new physical education component in your school?

   ☐ Yes  ☐ No  ☐ Not sure

   b. If yes, what challenges or barriers have you encountered?
7. Since the physical education program began, have you noticed or recorded any improvements or positive changes in:

a) student academic performance?  ☐ Yes  ☐ No  ☐ Not sure
b) student classroom behavior?  ☐ Yes  ☐ No  ☐ Not sure
c) student fitness and/or awareness of fitness?  ☐ Yes  ☐ No  ☐ Not sure
d) student enjoyment of/support for PE?  ☐ Yes  ☐ No  ☐ Not sure
e) other: _________________________?  ☐ Yes  ☐ No  ☐ Not sure

8. Briefly describe, using the questions below, one “success” story your program has achieved this year that shows the effect a physical education program can have on your students. (Please print/write clearly.)

b) Briefly describe the student’s problem or issue.
(Example: the student was failing because he physically acted out in class)
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

b). Briefly explain what your program did to help this student. (Example: Student was put in very active PE class allowing him to work off basic frustrations and “steam.”)
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

c). What was the outcome or result of your program’s efforts with this student? What did your student get out of the experience? (Example: student did less acting out in class; paid more attention to work)
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

d). What is the major significance of these results? Why was this “success” important? (Example: student having fewer behavioral problems in class and doing better on classwork.)
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

Thank you for your responses. Put your completed form in the envelope provided, seal it, and give it to the Elementary Physical Education teacher to send to the following person/address by _____.

Christine Hollis
PED Evaluation Team
University of New Mexico
Center for Health Promotion
1 University of New Mexico
MSC11 6145
Albuquerque, NM  87131