# **Physical Education Assessment Report**

Author:

**Evaluation 2000-2001** 

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#### Introduction

The purpose of this report is to present evaluation findings about the advantages and disadvantages of administering the Physical Education Assessment Report (PEAR) during its pilot year and to present information for district decision makers to use in determining whether to continue administration of the instrument. Also, this report includes suggestions for improving administration of the instrument.

The report includes a brief description of the PEAR, its finances, and the history of its adoption and implementation in the district. The effects of the PEAR on inclusion of the Texas Essential Knowledge and Skills (TEKS) in course content, on students' engagement in physical education (PE) classes, and on students' understanding of the skills involved in physical activities are discussed. This report also addresses parents', teachers', and students' perceptions of the PEAR and teachers' concerns about the time and effort spent completing it.

#### **PEAR Overview**

The PEAR, created in spring 1999, is a locally developed assessment instrument that addresses physical education content standards and benchmarks based on the standards created by the National Association of Sport & Physical Education, the TEKS, and the AISD Physical Education Curriculum Framework. The instrument, used with students in grades K-6, covers skills and concepts that are developmentally appropriate for each grade level.

The PEAR is used as a supplement to AISD's traditional letter grade system. It comprises a one-page listing for each grade level of the TEKS to be taught during that year. Teachers enter numerical grades from 1 to 4 showing students' level of mastery for every TEKS addressed in their PE classes. The PEAR is sent to parents in addition to a traditional letter grade. It is designed to help teachers in planning lessons that incorporate the TEKS and in assessing students' mastery of the TEKS. The PEAR is also intended to give students a better understanding of the skills they are required to master in PE. It is hoped that this will result in more enthusiastic and skills-focused involvement in PE classes. Finally, the PEAR is a tool that can help parents better understand what is expected of their children in PE classes and how their children are progressing in the development of specific PE skills.

Voluntary use of the PEAR on AISD's elementary campuses began in fall of 1999. In spring, 2000, the instrument was revised using input from district physical education teachers. During the 2000-01 school year, staff from 60% of the district's elementary campuses volunteered to participate in the PEAR pilot. Teachers received ongoing staff development on the Physical Education TEKS and the PEAR assessment system during monthly meetings. Assessment results were sent to parents with report cards four times during the school year.

Development of the PEAR in 1999 was funded through an allocation from the Department of Curriculum and School Improvement. During 2000-01, the budget for the PEAR was \$3,900. A total of 21,462 students were assessed with the PEAR, resulting in a per student reproduction cost of \$0.18.

#### Effects of the PEAR on course content

Effects of the PEAR on course content were assessed on the basis of observations of four second-grade and four fifth-grade classes. Half the observations were of PEAR classes and half were of non-PEAR classes. Each was evaluated in terms of the number of TEKS incorporated, the thoroughness with which the TEKS were explained and practiced, and students' level of engagement.

Of the two second-grade PEAR teachers observed, one addressed seven TEKS and the other addressed three. This is compared to the two non-PEAR teachers, one of whom addressed four TEKS and the other of whom addressed one. Instructors in the two fifth-grade PEAR classes addressed four TEKS and three TEKS, compared to the two fifth-grade non-PEAR instructors, who addressed four TEKS and one TEKS.

Table 1: Number of TEKS Addressed in Observed PE Classes by Grade

	PEAR		Non-PEAR	
Second grade	7	3	4	1
Fifth grade	4	3	4	1

n = 8

One unexpected finding that came out of the observations was the effect of class format. Researchers observed two formats: a "stations" format, in which small groups of students rotated among five or more activities, and a "full-class" format, in which all the students participated as a group in two to four activities. In PEAR classes, the stations format coincided with the higher number of TEKS addressed in both grades (seven in the second-grade class and four in the fifth-grade class). In non-PEAR classes, the stations format coincided with the lower

number of TEKS addressed in both grades (one TEKS in each class). Because of the small sample size, and because this comparison was made post hoc, this study cannot determine the impact of format on use of the TEKS.

#### Effects of the PEAR on students' engagement in PE classes

One intention for the PEAR was to give students a clear statement of the expectations for their performance, perhaps helping students become more focused and more engaged during PE classes. Students' engagement was assessed through observation of eight lessons. In the four second-grade classes observed, the majority of students participated enthusiastically throughout the period. Among the four fifth-grade classes observed, one PEAR class and one non-PEAR class had long periods of time when students were inactive, either listening to complicated directions or waiting for a turn.

No relationship was found between student engagement and use of the PEAR. Rather, the nature of inactivity among fifth-grade students seemed to vary across formats. The stations format was characterized by long explanations at the beginning of class, after which students stayed on task and seemed to enjoy the activities. In classes using a full-class format, explanations at the beginning were short, but individual students became disengaged from the lesson at various times throughout the period. Off-task behaviors included standing in lines, leaving for drinks of water, and standing still with no obvious focus of attention.

### Effects of the PEAR on students' understanding of skills taught in PE classes

A priority of AISD's PE program is to ensure that students do not just play games, but also develop the skills that underlie those games. The PE TEKS are intended to provide a framework for learning such skills. This study examined whether the explicit information provided in the PEAR about the skills being assessed helps students to develop awareness of skills. In focus groups of six students from each observed class, students were asked to list skills they had worked on recently. Skills were defined as, "things you learn to do in the games you play."

Among second-grade students, one non-PEAR group listed mostly games or activities that had been played in class. Students in the other non-PEAR group talked mostly about actions that are components of larger activities, including throwing, catching, running, and jumping. One group of PEAR students listed mostly activities, along with one action that is a component of larger activities, i.e., running. Students in the other PEAR focus group, which was conducted in Spanish, said that even with the explanation given, they did not understand the word

"calificaciones," which was used as a translation for "skills." They listed only activities that they had performed in class that day, including climbing ropes and jumping on a trampoline.

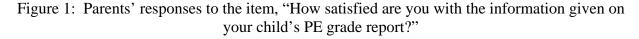
Among fifth-grade students, both groups of non-PEAR students listed combinations of activities and activity components. Both groups of PEAR students listed mostly activity components, including blocking and kicking. One group included one activity, rope climbing.

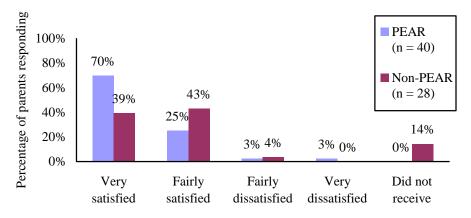
Only one second-grade class spoke readily about the skills that underlie activities, whereas all the fifth-grade classes spoke about them to some degree. This suggests that understanding of skills may be a function of age. Among fifth-grade students, PEAR students' lists appear to have shown more understanding of the skills that make up their games than non-PEAR students'. This finding suggests that for fifth-grade students, use of the PEAR may promote awareness of the skills that are taught in PE classes.

# Parents' teachers' and students' perceptions of the PEAR

# Parents' perceptions

Parents' opinions about the PEAR were assessed through a survey. Parents of 40 PEAR students (response rate = .50) and 28 non-PEAR students (response rate = .38) responded to the item, "How satisfied are you with the information given on your child's PE grade report?" As shown in Figure 1 below, 95% of PEAR parents and 82% of non-PEAR parents responded that they were satisfied with their grade reports. Of PEAR parents, 70% responded that they were very satisfied, and 25% responded that they were fairly satisfied. Of non-PEAR parents, 39% responded that they were very satisfied, and 43% responded that they were fairly satisfied.



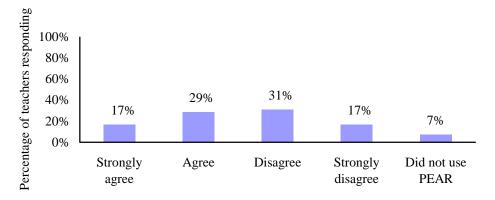


Based on survey results, most parents were satisfied with their children's grade reports. Parents who had received the PEAR were more satisfied with grade reports than parents who had received a letter grade only.

# Teachers' perceptions

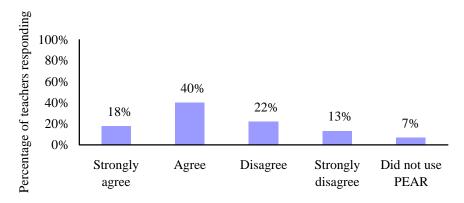
Teachers are divided in their opinions of the effectiveness of the PEAR. From among the campuses participating in the PEAR pilot, 42 teachers (return rate = .75) responded to a survey on the impact of the PEAR on instruction. Of those, 46% agreed that the PEAR had positively impacted their instruction, as shown in Figure 2. Seventeen percent of those teachers strongly agreed. Conversely, 48% of teachers surveyed disagreed with the statement, 17% strongly.

Figure 2: PEAR teachers' responses to the item, "Teachers' use of the PEAR has positively impacted the quality of their instruction." (n = 42)



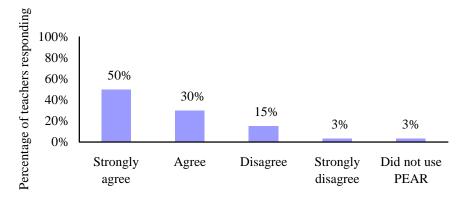
Asked whether use of the PEAR had positively impacted students' mastery of the physical education TEKS, 58% of teachers responding (n = 45, return rate = .80) agreed that it had, 18% strongly. Conversely, 35% disagreed, 13% strongly, as shown in Figure 3 on the following page.

Figure 3: PEAR teachers' responses to the item, "Teachers' use of the PEAR has positively impacted students' mastery of the physical education TEKS." (n = 45)



Teachers' mixed opinions of the effectiveness of the PEAR may be due in part to the time and effort necessary to complete it. Of 40 PEAR teachers responding to a survey (return rate = .71), 80% agreed that the PEAR took too much time to complete, 50% of them strongly, as shown in Figure 4 below. Only 18% of teachers responded that the PEAR did not take too much time to complete, 3% strongly.

Figure 4: PEAR teachers' responses to the item, "The Physical Education Assessment Report takes too much time to complete." (n = 40)



Each PE teacher is responsible for 21 separate classes, which makes the paperwork prohibitive. One non-PEAR teacher reported informally that he had declined to take part in the pilot because of the amount of paperwork required. One PEAR teacher reported informally that the assessment forms are too bulky to be used in the gym or on the playing field, so grades must be compiled in teachers' gradebooks and later copied onto the forms.

#### Students' perceptions

In focus groups, PEAR students reported that they were aware of the individual skill scores given on the PEAR, but many used the overall score much as they would use a letter grade. PEAR students' discussion of grades was very similar to non-PEAR students'. Despite PEAR students' possible superiority in knowledge of skills taught in PE, there was little evidence of a difference in the way PEAR students and non-PEAR students perceived assessment in PE classes.

# **Summary and recommendations**

Results of this evaluation indicate that PEAR parents are more satisfied with the PEAR than non-PEAR parents are in the letter grade they receive. In addition, in the fifth grade, PEAR students appear to show more knowledge of the skills taught in PE classes than non-PEAR students.

Because the PEAR increases parents' satisfaction with grade reports and may promote knowledge of PE skills among fifth-grade students, the evaluator recommends that use of the PEAR be continued, provided that additional research is done to investigate outcomes (i.e., incorporation of TEKS in PE classes and increases in 5<sup>th</sup> grade students' knowledge of PE skills).

However, the evaluator recommends that modifications be made in the construction or use of the PEAR to address teachers' frustration with the time and effort it requires. One option would be to reduce copying by programming a version of the PEAR that could be placed on laptop computers or handheld digital assistants which would be issued to the teachers, allowing them to complete the assessments on site. Alternatively, administrators in the Department of Athletics and Physical Education could reduce the amount of paperwork required during each assessment period by decreasing either the number of administrations each year or the number of students assessed at each administration. A third option would be to require students to take up the paperwork load through self-assessment.

In addition, to improve the effectiveness of the PEAR on student engagement and awareness of PE skills, the evaluator recommends that teachers take class time to be explicit about the form and about the specific skills and expectations each day.

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