Evaluation of the Texas Fitness Now Grant Program: 2007-08 to 2009-10 School Years

A Report to the 82nd Texas Legislature
Submitted in fulfillment of Rider 69 (81st Texas Legislature) by the Texas Education Agency Office for Planning, Grants and Evaluation
Evaluation of the
Texas Fitness Now Grant Program:
2007–08 to 2009–10 School Years

January 2011

A Report to the 82nd Texas Legislature
Submitted in Fulfillment of Rider 69 (81st Texas Legislature)

Prepared by
Office for Planning, Grants, and Evaluation
Texas Education Agency
Table of Contents

Table of Contents .......................................................................................................... ii
List of Tables ............................................................................................................. Error! Bookmark not defined.
List of Tables in Appendices .................................................................................. Error! Bookmark not defined.
EXECUTIVE SUMMARY .......................................................................................... 1

**TFN Grant Funding and Eligibility** ................................................................................. 1
**TFN Program Evaluation** .......................................................................................... 2

**Findings** .................................................................................................................. 2

**Distribution of TFN Grants** .......................................................................................... 2
**Campus Use of TFN Funds by Grant Year** .................................................................... 3
**Implementation of TFN Grant Activities** ...................................................................... 4
**Physical Fitness Levels in TFN Schools** ...................................................................... 4
**Relationship between Physical Fitness and TAKS Outcomes in TFN Schools** .............. 5
**Conclusions** ................................................................................................................ 6
EXECUTIVE SUMMARY

Highlights

- During the 2007–08 to 2009–10 school years, the Texas Education Agency awarded Texas Fitness Now (TFN) grants totaling $27.4 million to Texas schools with students in Grades 6–8 (605, 575, and 981 schools, respectively). In 2009–10, TFN-funded activities potentially impacted as many as 425,000 students attending grantee campuses.

- TFN participation was associated with significant increases in the percentage of boys and girls who scored in the Healthy Fitness Zone (HFZ) from pre- to post-tests on five of the six FITNESSGRAM® assessments, specifically Aerobic Capacity, Curl-Ups, Trunk Lift, Upper Body Strength and Endurance, and Flexibility.

- Data were not available to allow examination of the relationship between individual student fitness and academic outcomes. Generally, TFN campuses with high percentages of students scoring in the HFZ at post-test also had high percentages of students who met Texas Assessment of Knowledge and Skills (TAKS) passing standards (specifically TAKS-Math and TAKS-Reading passing standards). The greatest number of statistically significant positive correlations between physical fitness assessments and TAKS performance was found in the 2009–10 school year, with the fewest found in the 2007–08 school year, indicating there may be a cumulative effects of TFN participation. Importantly, this data is relational rather than causal.

This document reports on the evaluation of the Texas Fitness Now (TFN) grant program, in fulfillment of Rider 79 (General Appropriations Act (GAA), Article III, 80th Texas Legislature). TFN was authorized by Rider 89 (GAA, Article III, 80th Texas Legislature; further authorized by Rider 79, GAA, Article III, 81st Texas Legislature). Commencing during the 2007–08 school year, the purpose of TFN grants was to supplement in-school physical education (P.E.), nutrition, and fitness programs with the goal of reducing childhood obesity and the future incidence of Type II diabetes among early adolescents within middle schools containing large populations of economically disadvantaged students. TFN placed specific emphasis on the importance of P.E. and fitness for students in Grades 6, 7, and 8 as the foundation for a life of healthy choices. The Texas Comptroller of Public Accounts (CPA) and the Texas Education Agency (TEA) have developed the TFN program and set the guidelines, while TEA has processed TFN grant applications and distributed the grants.

TFN Grant Funding and Eligibility

In the 2008-2009 biennium, TFN funding sources were identified by the CPA per Rider 89 (GAA, Article III, 80th Texas Legislature). TFN funding for the 20010-2011 biennium was continued per Rider 79 (GAA, Article III, 81st Texas Legislature). TEA awarded approximately $9.1 million in grant funds in 2007–08, $9.4 million in 2008–09, and $8.9 million in 2009–10. TEA will award TFN grants for 2010–11, but these grants are beyond the scope of the present evaluation.
TEA awarded TFN grants to eligible public schools, consisting of school districts and open-enrollment charter schools. In the first two years of this non-competitive grant program (2007–08 and 2008–09), eligible campuses were those that served students in Grades 6, 7, or 8, and that had student populations composed at least 75% economically disadvantaged students. In the third year (2009–10), the list of eligible campuses expanded to include campuses whose student populations were at least 60% economically disadvantaged.

**TFN Program Evaluation**

This evaluation first summarizes the distribution of TFN funds during each grant year. Next, implementation of TFN by grantees is described, followed by a description of the factors that facilitated or impeded implementation of TFN activities across each grant year. Finally, the evaluation examines the extent to which students’ physical fitness measures changed over each school year, based on pre- and post-test FITNESSGRAM® assessments, and the relationship between students’ physical fitness assessments and academic performance.

**Findings**

**Distribution of TFN Grants**

- The number of campuses that were awarded TFN grants increased by over 62% from 2007–08 to 2009–10, due in part to the shift in eligibility requirements.
  - TEA awarded TFN grants to 605 campuses in 2007–08 and to 981 campuses in 2009–10. The potential number of students served by TFN grants also increased from approximately 254,392 students in 2007–08 to about 425,333 students in 2009–10.
  - Exact numbers of students participating in TFN grant activities are unknown, as is any given student’s level of participation in TFN grant activities. For example, in 2007–08, participating campuses reported approximately 255,000 students in Grades 6–8, the grade levels targeted by this program. Though it is unlikely that all of these students participated in TFN funded activities, this number indicates the potential population served by the program. Grantees could choose to serve students only in certain grades and/or could run TFN activities before and after school with subgroups of students based on grantee needs.
- The average TFN grant award decreased from 2007–08 to 2009–10. In 2007–08, the average TFN grant award was about $15,006. This increased to $16,300 in 2008–09. Due to the additional number of eligible campuses, the average award dropped to $9,042 in 2009–10.
- Many of the 2007–08 TFN campuses were also awarded a TFN grant in subsequent years. In 2008–09, 96% of the 575 grant recipients were second-year TFN participants. In 2009–10, 53% of the 981 grantees were third-year participants, 7% were second-year participants, and the remaining 40% were first time grantees (most of whom were eligible for TFN for the first time).
Opportunities for Students Provided by TFN Funds

- During all three years, campuses reported that they were able to provide more traditional P.E. equipment (e.g., balls, racquets) to their students than they had in the past. This ranged from 62% of campuses in 2007–08 to 65% in 2008–09, with 64% reporting this in 2009–10.
- At least 40% of respondents during each grant period reported that they used grant funds to provide more of the following materials or activities than they had in the past: (1) pedometers, (2) non-traditional P.E. equipment (e.g., yoga mats, Pilates balls), and (3) increased access for physical activity (e.g., additional opportunities for students to engage in physical activity). Across all three years, respondents identified computer equipment, exercise machines, and fitness game centers as items that they had not yet purchased but would like to provide to students in the future.
- Many grantees provided open-ended responses clarifying new opportunities provided to students. For example, a 2007–08 respondent explained that the purchase of “a classroom pack of heart rate monitors... along with a sport wall,” enabled the school to “track students’ cardio and work to get students to the HFZ.” In 2009–10, a grantee reported developing a “wellness program” to offer students “nutrition education and consultants who provided presentations targeting student health and wellness.”

Opportunities for Staff Provided by TFN Funds

- TFN funds provided staff with new/additional fitness curriculum (38% in 2007–08; 49% in 2008–09; 45% in 2009–10) and expanded staff professional development (PD) opportunities (30% in 2007–08; 34% in 2008–09; 36% in 2009–10).
- Across all three years, the lowest percentage of respondents reported using TFN funds to add additional staff, with 6% or less of all respondents reporting that they were able to hire a greater number of fitness staff than in the past.
- When asked to report in an open-ended format the opportunities and materials afforded to staff, many grantees discussed PD training. For example, a 2009–10 respondent noted, “[P]rofessional development has been one of the best investments our campus has made with the grant funds. All of the teachers have come up with new ideas and lessons...”
- Across all three grant years, grantees reported that one unexpected benefit of TFN was the provision of fitness and nutrition resources to staff, complementing the wellness opportunities provided to students. For example, a 2008–09 participant noted that “[h]aving more of a variety of workout equipment provides the teacher/staff more of an option of ways they can choose to work out and stay in shape. The participation of teachers in staff wellness incentives has increased the moral[e] and attitude, which reflects on their expectations of their students.” These statements suggest that some campuses were working toward developing schoolwide health and fitness programs, in which student and staff fitness goals reinforce one another.
Implementation of TFN Grant Activities

- From 2007–08 to 2009–10, increasing percentages of grantees reported having fulfilled TFN grant requirements.
  - By the end of 2009–10, approximately 90% of grantees reported having fulfilled implementation of each of the following activities: (1) conducted initial fitness assessment, (2) adhered to appropriate practices for P.E., and (3) provided opportunity for the target population to participate in physical activity 30 minutes daily.
  - Developing a schedule for the School Health Advisory Council (SHAC) and coordinating with Wellness Policy requirements for the Texas Department of Agriculture (TDA)\(^1\) were the two areas in the greatest need of development, as measured by the percentage of respondents indicating no implementation or only plans for implementation by the end of 2009–10.

- By the end of 2009–10, at least 80% of campuses reported that they were able to pursue five of the eight grant activities with no obstacles. Across all three years, time was the most commonly mentioned barrier to TFN implementation. One challenge was the timing of TFN grant awards. TEA informed grantees early in the school year that they were eligible for the grant, but actual awards in each of the three years occurred did not begin until November to February. Grantees reported feeling unable to order materials without an award letter in place. A second time challenge related to conducting both pre- and post- FITNESSGRAM\(^\circledast\) assessments. Grantees reported large class sizes and students being removed from P.E. class for academic tutoring as challenges to having the time to complete all assessments.

- From 2007–08 to 2009–10, implementing a Coordinated School Health Program (CSHP), coordinating with Wellness Policy requirements, and developing a schedule for the LEA’s SHAC meeting were also activities with which participants commonly struggled. This suggests that participating campuses may need more support in pursuing these activities.

- When asked what factors facilitated the implementation of grant activities, at least two-thirds of 2009–10 respondents reported at least one facilitator for each of the eight program activities. Grantees listed administrative support, staff expertise, and student enthusiasm as key for successful program implementation. Participants were more likely to select one or more facilitator for each activity in 2007–08 than they were in 2009–10. This may indicate that grantees relied less on facilitators or were able to fulfill more easily grant activities during the third year of the program than they did during the first year.

Physical Fitness Levels in TFN Schools

- Within each of the three evaluated years of the TFN program, the percentage of boys and girls who scored in the Healthy Fitness Zone (HFZ) increased between pre- and post-tests for the following FITNESSGRAM\(^\circledast\) assessments: Aerobic Capacity, Curl-Ups, Trunk Lift, Upper Body

\(^{1}\) For more information on TDA’s Local Wellness Policy, please refer to the following document: [http://www.squaremeals.org/vgn/tda/files/2348/38183_FND-05_%20Local%20Wellness%20Policy%20Checklist.doc](http://www.squaremeals.org/vgn/tda/files/2348/38183_FND-05_%20Local%20Wellness%20Policy%20Checklist.doc)
Strength and Endurance, and Flexibility. This represents improvement in five of the six FITNESSGRAM® assessments.

- The only assessment that showed evidence of a decline from pre- to post-test was Girls Body Composition in 2009–10, with just over a one-percentage-point difference between the two tests.

- Data indicated that students’ pre-test scores on the fitness assessments tended to improve across the three years of the TFN program (e.g., a greater percentage of students’ scored in the HFZ on the 2009–10 pre-test than on the 2008–09 pre-test). This suggests that students on campuses receiving TFN grants may be maintaining or improving their fitness levels from one year to the next.

- In 2009–10, additional analysis examined fitness levels based on number of years of implementation. Campuses in their first year of implementation tended to report higher percentages of students scoring in the HFZ at post-test than did campuses in their second or third years of the program. Pre-test scores did not vary greatly across first-, second-, or third-year participants in 2009–10.

Relationship between Physical Fitness and TAKS Outcomes in TFN Schools

- Most of the significant relationships between fitness assessments and academic outcomes were positive. Physical fitness outcomes, as measured by the percentage of students scoring in the HFZ at post-test, were more likely to correlate significantly with TAKS-Reading or TAKS-Math outcomes than with TAKS-Social Studies or TAKS-Science outcomes, although that may have been an artifact of the smaller number of campuses reporting Social Studies and Science outcomes. The following correlations were statistically significant:
  - The following fitness assessments were positively correlated with TAKS-Reading: Girls Flexibility (2009–10), Girls Body Composition (2008–09, 2009–10), and Boys Body Composition (2009–10). In 2007–08, Girls Body Composition was negatively associated with TAKS-Reading.
  - Girls Body Composition (2008–09, 2009–10) was positively correlated with TAKS-Math outcomes. Boys Flexibility (2008–09) and Boys Body Composition (2008–09) were negatively associated with this test.
  - Girls Body Composition (2009–10) was positively correlated with TAKS-Science outcomes.

- The greatest number of statistically significant positive correlations between physical fitness assessments and TAKS performance was identified for the 2009–10 school year. The fewest statistically significant correlations were found in the 2007–08 school year. This pattern may indicate that effects of the TFN program are cumulative. As campuses develop and expand the wellness programs offered to students and staff, the discipline and effort required to achieve acceptable physical fitness levels may extend into the classroom.
Conclusions

TFN grantees were overwhelmingly positive about their experiences with the grant. Many grantees commented that new materials and opportunities provided by the grant resulted in increased enthusiasm on the part of both staff and students. Campus-level improvements on student performance from pre- to post-test on the FITNESSGRAM® assessment suggests that TFN grant opportunities may be positively impacting the health of middle school students in Texas. TEA would need to collect student-level data, which were unavailable for the current report, to assess more precisely the potential impact of TFN. Finally, while many grantees reported successes related to engaging students, staff, parents, and the community in TFN support activities, other grantees clearly report being challenged in doing so. Recommendations for the future, should the TFN grant continue, include creating opportunities for grantees to communicate with one another and identifying potential best practices.