Presidential Youth Fitness Program: Year #2 Progress Report

Darla M. Castelli¹, Jessica Cance¹, Seraphine Pitt Barnes², Jane Wargo³, Jeanne Barcelona¹, & Mark Worrell¹

Submitted for review on March 30, 2015
Approved June 29, 2015

¹ The University of Texas at Austin
²Centers for Disease Control and Prevention
³Presidential Youth Fitness Program

The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Presidential Youth Fitness Program: Year 2 Progress Report

The Presidential Youth Fitness Program (PYFP) has affected hundreds of schools and thousands of students through its three programmatic components: teacher professional development, student assessment, and student recognition. Because of the PYFP, physical education programs have integrated fitness education resources into their curricula or enhanced their fitness education process in a way that would not have been possible without funding. The PYFP has facilitated use of the FITNESSGRAM® software to assess student fitness and the use of assessment data to plan future instruction. Yet, the growth and effectiveness of PYFP are potentially being inhibited by specific inputs, behavioral outcomes, and intermediate outcomes. (Calvert et al., 2015). The purpose of this Year 2 Progress Report is to suggest ways to overcome the programmatic dynamics influencing the inputs, behavioral outcomes, and intermediate outcomes of the PYFP by presenting three substantive recommendations and corresponding action steps that should be considered relative to the availability of funds.

**Figure 1. Logic Model**

**Inputs**
- **School Factors**
  - Physical education requirements
  - Resources
- **Teacher Factors**
  - Previous experience with fitness assessment
  - Resources
  - Professional development effectiveness
- **Student Factors**
  - Exposure to PYFP
  - Familiarity with fitness assessments

**Behavioral Outcomes**
- **Professional Development**
  - Percentage of teachers completing the training
- **FITNESSGRAM® Implementation**
  - Number of components assessed
  - Percentage of students assessed
  - Level of implementation
- **Awards and Recognition**
  - Percentage of eligible students receiving an award

**Intermediate Outcomes**
- **Youth Fitness**
  - Percentage of students in the HF2
  - Portion of students receiving awards

**INPUTS - Recommendation #1: Modify the PYFP Rollout**

Recruitment of schools into the PYFP program occurs through multiple venues and networking sources, such as professional organizations (i.e., SHAPE America) and school-based obesity prevention initiatives (i.e., Fuel up to Play 60!). Given the many possible ways that schools can gain access to the PYFP, it is recommended that several accountability and organizational steps be taken that would enhance the tracking of the PYFP implementation over time and promote shared responsibility for implementation across both teacher, administrators, and other school personnel.
Specific Steps Relating to Inputs:

1. Complete the PYFP application at the school level whenever possible. Avoid enrolling schools for funding through the PYFP who do not complete an application or who only complete an application at the district level, as the application includes items that are an important assessment of readiness to implement the PYFP at the school level.

2. Have schools complete the PYFP Readiness Index (to be released in September 2015), a self-assessment of the readiness of the school personnel to take on the programmatic responsibilities. The evaluation team has learned that schools without facilities, instructional technology support, and physical education or physical activity polices are less likely to make progress toward the PYFP implementation.

3. Require at least one teacher from each school to complete the PYFP Course #1 online as part of eligibility criteria for the grant application. Because the professional development portion of the PYFP was determined to be meaningful, relevant, and needed (see Year #1 report), Course #1 should become part of the application process. Further, teacher and administrator interviews (20 teacher and 3 administrator interviews; across 25 different schools of different levels of implementation) suggested that because Course #1 focused on common knowledge and best practices among the field, there should be careful selection of the teacher who completes Course #1. For example, an administrator may want to identify a teacher beyond the known physical activity champion and instead identify someone who has not recently participated in physical education specific professional development, a teacher with alternative certification in the field of physical education, or a non-physical education teacher who might be willing to assist with the PYFP.

Provide all PYFP participating schools with an infographic or flow chart of all stakeholders and initiatives, as 12/20 teachers who participated in formal interviews have reported being confused by programmatic acronyms (i.e., PYFP, LMAS, PALs; and National Framework for Physical Activity and Physical Education; see Appendix A for an example). This will help the teachers understand that they are part of something bigger, similar to the impact that Jumprope for Heart has had with physical education teachers (see http://www.heart.org/HEARTORG/Giving/ForIndividuals/JoinanEvent/Jump-Rope-for-Heart-Event_UCM_315609_SubHomePage.jsp for more information about the impact)

BEHAVIORAL OUTCOMES - Recommendation #2: Implement Elements of Gamification into the PYFP

The PYFP relies on teacher intrinsic motivation for implementation; however, teachers have varying degrees of internal motivation and face different barriers within their school environment. Teachers who are more externally motivated may need incentives to move toward activating intrinsic motivation to integrate fitness education into his or her physical education program. To increase teacher intrinsic motivation, one theory-based application is the integration of gamification strategies into the PYFP. Gamification is the use of gaming techniques (i.e., badges, points, levels, and progress bar) and game designs to engage and motivate people to achieve their goals (Deterding, Dixon, Khaled, & Nacke, 2011; Kapp, 2012). Gamification has been applied to educational settings through the common mechanisms of (a) points (a running number of tasks completed); (b) digital badges (symbols, pins or buttons that can
be tagged onto e-mail signatures or social media); (c) levels (stages where individuals are granted something, such as additional student awards or school recognition); (d) leaderboards (tracking progress compared to others); and (e) challenges (tasks that offer an advantage). Research suggests that the elements of gamification develop loyalty, increase awareness, and adherence (Lee & Hammer, 2011). Accordingly, it is recommended that some elements of gamification be added to the PYFP professional development and added to the awards and recognition portion of the program.

Specific Steps Relating to Behavioral Outcomes:

1. Provide teachers with a digital badge for each step that they complete or for accomplishments above the required program elements. Instead of having an 80% correct score on the knowledge checks for successful completion of each course, teachers could be awarded a digital badge for each course completed and an additional recognition if a high score (e.g., 90%) is achieved. In addition, if a teacher participates in a FITNESSGRAM® assessment and gets 5 out of 6 assessments in the Healthy Fitness Zone, then they could receive a PYFP patch that says “Fitness Leader.” By the teacher having an opportunity to be recognized through the use of digital badges, value is being added to his/her credentials.

2. Create a website where each teacher can login and track their progress toward completion and compare their accomplishments to other teachers.

INTERMEDIATE OUTCOMES - Recommendation #3: Integrate a Multi-Phase Optimized Program Approach

To address some of the previously reported challenges (see the barriers identified in the Year 1 report; technology, communications, and administrative support) within PYFP, a third recommendation emerged. The PYFP Readiness Index can be used not only as a screening to determine if a school should be funded or not, but also as a means to determine what type of training the teachers should be offered. This approach is called a multi-phase optimized approach that focuses on providing targeted program components that are need-based. For example, funded schools with a low PYFP Readiness score should be offered in-person training, with the virtual courses being offered as “booster” enhancements across a 2- to 3-year period. Schools with a high PYFP Readiness score would be offered virtual training with fewer “booster” opportunities. Two times per year, feedback could then be provided to schools about their implementation progress. On the basis of this feedback, the program could be refocused and optimized to meet the needs of schools.

Specific Steps Relating to Behavioral Outcomes

1. Because schools face technology, communication, and administrative barriers, we suggest that schools be given more time to complete the programmatic components of the PYFP and permit a flexible timeline of at least two years.

2. Revise the in-person training to include (a) experiencing and administering the FITNESSGRAM® assessments; (b) a sampling of Physical Best fitness activities; (c) FITNESSGRAM® software training (i.e., imputation of student data and creation of reports); (d) interpretation of student FITNESSGRAM® assessments; (e) overcoming barriers; and (f) a team approach to the training such as bringing an administrator and IT personnel.
3. Create a bank of effective strategies for overcoming barriers. This should be available online, perhaps through Exchange, which is an online forum for teachers supported by SHAPE America.

4. Provide additional technological support directly to the teachers. For example, teachers should have access to a website with FAQs such as, “How can I create a PYFA report?” Further, teachers should be able to submit concerns (i.e., “When using the FITNESSGRAM® iPad application, the entire page scrolls, you cannot scroll by row” or, “The professional development Prezi presentation slides in Course #3 cause my computer to freeze”) to an online tracking system.

5. Continue to provide a webinar for each grant funding round, specifically focusing on the generation of the student FITNESSGRAM® reports. Given different US time zones and teaching schedules, these webinars should be recorded and placed in an online format to be viewed at a teacher’s convenience.

6. Develop additional virtual training courses focused on (a) strategies for overcoming barriers (e.g., how to advocate for the PYFP among school administrators, how to secure resources needed to sustain the PYFP) and (b) interpreting student FITNESSGRAM® data and applying student data outcomes to instruction.

In sum, these recommendations are approaches that are believed to facilitate the PYFP implementation and increase the likelihood of programmatic sustainability, on the basis of the first 1.5 years of the PYFP evaluation.

References


Kapp, Karl M. The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education. San Francisco, CA: John Wiley & Sons; 2012.


Appendix A: Sample Flow Chart of National Initiatives
