

Arkansas Child Wellness Intervention Project: An Evaluation of the Implementation of the Three-Year Program



Produced by the Arkansas Center for Health Improvement on behalf of the Arkansas Tobacco Settlement Commission.

The Arkansas Center for Health Improvement (ACHI) is a nonpartisan, independent, health policy center dedicated to improving the health of Arkansans. It is jointly sponsored by the University of Arkansas for Medical Sciences, the Arkansas Department of Health, Arkansas Blue Cross and Blue Shield, Arkansas Children's Hospital and Delta Dental of Arkansas.



Copyright © June 2014 by the Arkansas Center for Health Improvement

Table of Contents

Table of Contents	2
Executive Summary	3
Part 1. Background	4
<i>Arkansas Context</i>	4
<i>Child Wellness Intervention Project (CWIP) Overview</i>	4
Part 2. Review of CWIP to Date	6
<i>Schools enrolled in three cycles</i>	6
<i>Summary of Previous Evaluations</i>	6
Part 3. Current Evaluation	8
<i>Context</i>	8
<i>Purpose</i>	9
<i>Methods</i>	9
<i>Results</i>	10
<i>CWIP Innovators</i>	12
Part 4. Final Conclusions	15

Executive Summary

Since the passage of Act 1220 in 2003, Arkansas has pursued unprecedented efforts to curtail the obesity epidemic among children and adolescents across the state. The Child Wellness Intervention Project (CWIP) was one of the first programs of its kind in Arkansas. CWIP was designed to increase the amount of time children spent in active physical education during school hours. Funded by the Arkansas Tobacco Settlement Commission (ATSC) and developed in partnership with the Arkansas Department of Education (ADE) and Arkansas Children's Hospital (ACH), CWIP used an evidence-based physical education curriculum and school-based health education strategies in public schools. During the three funding cycles, 118 elementary and middle schools received multiple grants to implement the program across grades kindergarten through eighth.

Prior evaluations of CWIP were completed that examined the impact of Cycle One and Cycle Two grants on students in participating schools. The purpose of these evaluations was to summarize data provided through ATSC-administered surveys and collected Fitnessgram data on individual children participating in the program. Schools that participated in CWIP reported meaningful changes in how they provided physical activity and health education to students. Findings also indicated that students experienced significant improvements to their physical fitness from the beginning to the end of the school year.

The current evaluation provides additional insight into both the challenges and strengths in the implementation of CWIP. Survey and in-depth interview data were collected from CWIP program participants including elementary and middle school teachers, coordinators, and administrators who implemented the program during the three-year grant. Summary of these data revealed a diverse range of experiences with the CWIP program. Two clear strengths were the provision of financial resources to schools and the SPARK curriculum.

The following report provides recommendations aimed at similar future programs grounded in the findings of the analysis. The results highlight key areas of consideration for future funding entities or program administrators that are informed by research, though they may not acknowledge funding mechanism limitations. First, the need for streamlined and well-defined goals was evident from this investigation. Second, offering flexibility to grant schools different types of resources based on diverse needs was suggested. Third, thorough initial and follow-up training is recommended to ensure participants are prepared for implementation. Lastly, recommendations are provided regarding the selection of program components that maximize child health and wellness outcomes.

Part 1. Background

Arkansas Context

Childhood obesity is a significant national health concern, particularly in the southern states. Reports indicate that 17 percent of youth in the United States are obese.¹ In Arkansas, more than one-third of public school students are overweight or obese.² A recent report by the Trust for America's Health indicates that children in Arkansas have the seventh highest rate of childhood obesity in the nation.³ The childhood obesity epidemic has far-reaching implications including an increased likelihood of developing serious health conditions such as type-II diabetes, hypertension, and sleep apnea.⁴

In 2003, the Arkansas General Assembly passed Act 1220, landmark legislation designed to “coordinate statewide efforts to combat childhood obesity and related illnesses to improve the health of the next generation of Arkansans.”⁵ This act represents the first statewide, legislatively mandated approach to addressing childhood obesity in the United States. The multifaceted endeavor includes removing vending machines from elementary schools, limiting access to vending machines in middle and high schools, annual body mass index (BMI) screenings with confidential reporting to parents, creation of district wellness committees, and a legislatively appointed Child Health Advisory Committee to recommend nutrition and physical activity standards for public schools. Act 1220 has resulted in a number of systematic changes within public schools and the communities that surround them, enhanced awareness statewide, and focused intervention efforts toward the reduction of childhood obesity.

Child Wellness Intervention Project (CWIP) Overview

To promote health and wellness in Arkansas public schools, CWIP was launched in 2010 by the Arkansas Tobacco Settlement Commission (ATSC) and the Arkansas Department of Education (ADE) Office of Coordinated School Health (CSH), in collaboration with Arkansas Children's Hospital (ACH) and the Arkansas Center for Health Improvement (ACHI). CWIP is the first program of its kind specifically designed to provide needed physical activity and health education to children across Arkansas. CWIP uses an evidence-based physical education curriculum and school-based strategies to increase time spent in active physical education. It is built upon the increasing empirical evidence that indicates students who are more physically active tend to be healthier and perform better academically.⁶

CWIP was initially developed for children in kindergarten through the eighth grade, with pre-kindergarten added in 2011. The program provided grant funding for physical education equipment, the SPARK physical education (PE) curriculum, Fitnessgram assessment software, and a health education curriculum called HealthTeacher.com.

¹ Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2001-2012. *JAMA*. 2014;331(8):806-814.

² Arkansas Center for Health Improvement. *Assessment of Childhood and Adolescent Obesity in Arkansas Year Ten (Fall 2012 – Spring 2013)*. Little Rock, AR: ACHI; January 2014.

³ Trust in America's Health, Robert Wood Johnson Foundation. *Fas in Fat: How obesity threatens America's future 2013*. Washington, D.C.: Trust for America's Health; 2013. Available at: <http://healthyamericans.org/assets/files/TFAH2013FasInFatReportFinal%209.9.pdf>. Accessed April 14, 2014.

⁴ Whitaker RC, Wright JA, Pepe MS, Seidel KD, Dietz WH. Predicting obesity in young adulthood from childhood and parental obesity. *N Engl J Med*. 1997;337(13):869-873.

⁵ Act 1220 of 2003, HB 1583, 84th General Assembly, Regular Session (AR 2003).

⁶ Coe DP, Pivarnik JM, Womack CJ, Reeves MJ, Malina RM. Effect of physical education and activity levels on academic achievement in children. *Med Sci Sports Exerc*. 2006;38(8):1515-1519.

School participation was determined through a grant application process with a set of minimum requirements for schools to qualify. Participants must be an Arkansas public or charter school with a designated indoor physical education facility or other appropriate area so the program could be implemented indoors if weather is not suitable for outdoor activity. The required curriculum must be taught by a licensed physical education instructor in each of the grades receiving the grant. And, applicants must commit to three years of providing students in the grades covered by the grant with a minimum of 120 minutes per week of active physical education.

CWIP grantees were selected based on the following categories:

- Educational cooperative representation
- Ability to show readiness and need
- Percentage of students who qualify for free or reduced-cost meals through the National School Breakfast and Lunch Program
- Percentage of children overweight or obese based on the most recent annual BMI analysis
- Amount of physical education time committed by the grant applicant



Part 2. Review of CWIP to Date

Schools Enrolled in Three Cycles

CWIP provided funding through three annual cycles to both elementary and middle schools across Arkansas. A total of 171 grants were provided to 118 schools during this time. Table 1 provides information about funding across the different grade groups and years. During the first year of CWIP (2010-2011 school year), funding was provided through 52 grants to 34 schools across three grade groups. Funding was provided to 61 grantees in 44 schools during the second year (2011-2012 school year), across all four grade groups. For the last year (2012-2013 school year), funding to implement the program was provided through 58 grants in 45 schools, also across all four grade groups.

Table 1. Number of Grants by Grades Awarded and Grant Cycle

	Cycle One (2010-2011)	Cycle Two (2011-2012)	Cycle Three (2012-2013)
Pre-K	--	5	2
K-2	19	19	20
3-6	25	22	20
7-8	8	15	16

Note: This information is based on records kept by ACHI Evaluation Team, provided by ATSC.

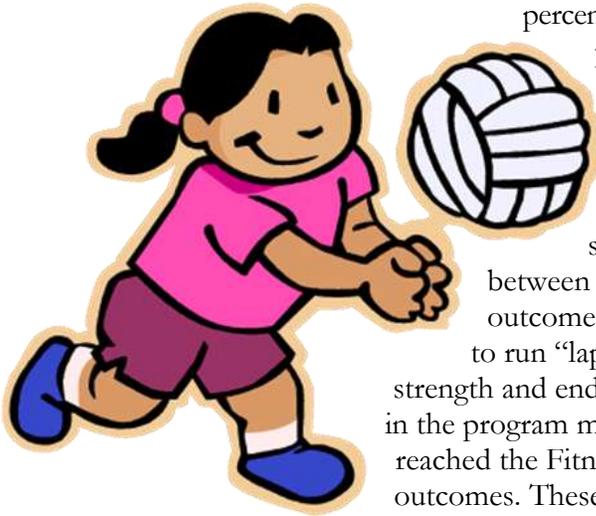
Summary of Previous Evaluations

Two prior evaluations were conducted by the ACHI evaluation team to examine the impact of CWIP for Cycle One and Cycle Two schools. The purpose of these evaluations was to summarize data provided through ATSC-administered surveys and school collected Fitnessgram data on individual children participating in the program. (Please see prior reports for full details on these evaluation findings).^{7,8}

In summary, schools that participated in CWIP reported meaningful changes in how they provided physical activity and health education to students. Results from both evaluations indicated that CWIP schools, on average, provided a significantly higher number of minutes of physical education per week than the non-CWIP schools for children in grades K-5, and this difference was statistically significant.^{7,8} Results for children in the sixth grade also showed a trend suggesting the CWIP schools offered more minutes of physical education than non-CWIP schools, but this trend was not statistically significant. Further, in the first year, schools reported high satisfaction with the CWIP program and the SPARK curriculum, with nearly 100 percent of schools indicating complete satisfaction with all aspects of the program. Over 90 percent of schools also reported that more health lessons were taught due to implementation of CWIP. The most common type of lesson taught was nutrition (91

⁷ Arkansas Center for Health Improvement. *Child Wellness Intervention Project: 2010-2011 Report*. Little Rock, AR: ACHI; March 2012.

⁸ Arkansas Center for Health Improvement. *Arkansas Child Wellness Intervention Project: 2011-2012 Evaluation*. Little Rock, AR: ACHI; April 2013.



percent of schools), followed by tobacco and injury prevention, prevention of alcohol and drug abuse, community/environmental health, and personal/consumer health.

Results from the first two evaluations also indicated that children who participated in CWIP demonstrated significant gains in four of the five Fitnessgram outcomes between the beginning and the end of the school year. These outcomes included the PACER (aerobic activity requiring students to run “laps”), Curl-up (i.e., sit-ups), Push-up, and Trunk lift (a strength and endurance activity). Furthermore, by the end of their first year in the program more than 65 percent of students participating in CWIP reached the Fitnessgram Healthy Fitness Zone standards across all outcomes. These results were consistent for each of the two evaluations.

Part 3. Current Evaluation

Context

While previous evaluations point to the overall success of the CWIP program, several implementation and sustainability challenges were identified by ATSC staff, the evaluation team, and program leaders over the course of the three year grant period. These include operational obstacles within schools and challenges in leadership, including turnover within the ATSC at the Executive Director and Grants Coordinator levels, changes in state coordinators at the Arkansas Departments of Health and Education, and staff changes within CSH.

Along with structural challenges, issues were identified with the collection of Fitnessgram data (the primary outcome measure for the program). At the outset, CWIP schools were required by contract to participate in Fitnessgram assessments two times per year for all children enrolled in the specific grades for which they received grants. Despite an increase in the percentage of students assessed, the year-three data collection revealed a substantial nonresponse bias in the Fitnessgram data. Fitnessgram completion rates were less than 50 percent across all three years (see Table 2). Of the participating schools, four did not submit any Fitnessgram data.

Table 2. Fitnessgram Data Collection for Grantee by Grant Cycle

	Percent Assessed	Number of Students with Complete Fitnessgram Data	Number of Students Participating in Fitnessgram
Cycle One (2010-2011)	34.4%	3,509	10,198
Cycle Two (2011-2012)	49.9%	7,987	15,991
Cycle Three (2012-2013)	45.1%	12,967	28,751

Across the three-year grant cycle, the Fitnessgram assessments were characterized by high rates of missing data. Only 745 students from Cycle One (awarded 2010-2011 school year) had complete Fitnessgram data into the second school year (2011-2012). This represents only 7.3 percent of the original 10,198 children. Further, only 352 students from Cycle One had complete Fitnessgram data for the first, second, and third years (e.g., complete data in 2010-2011, 2011-2012, and 2012-2013)—representing only 3.5 percent of the original group of children. For Cycle Two (awarded 2011-2012 school year), complete Fitnessgram data across two years (2011-2012 and 2012-2013) was available for 2,571 students. This represents 16 percent of the original 15,991 children.

These challenges prompted a review of the original evaluation plan for the third year of CWIP and a proposal for alternative approaches. The first proposed strategy was to launch a targeted data collection effort aimed at increasing the Fitnessgram response rates across all schools in order to replicate prior CWIP evaluations. However, given the costly and time consuming nature of the project, the Commission chose to adopt a second proposed approach. This approach comprised an in-depth qualitative program assessment aimed at identifying the core challenges to program implementation. This strategy was designed to provide ATSC with better information about overall successes and challenges in the CWIP program to inform future efforts that fund similar programs.

Purpose

The goal of this evaluation is to provide a detailed description of school experiences with the CWIP program. To do so, both survey and in-depth interview data were collected from CWIP program participants including elementary and middle school teachers, coordinators, and administrators who implemented the program during the three-year grant. The purpose was to assess the efficacy of the program and to describe the challenges and strengths of program components.

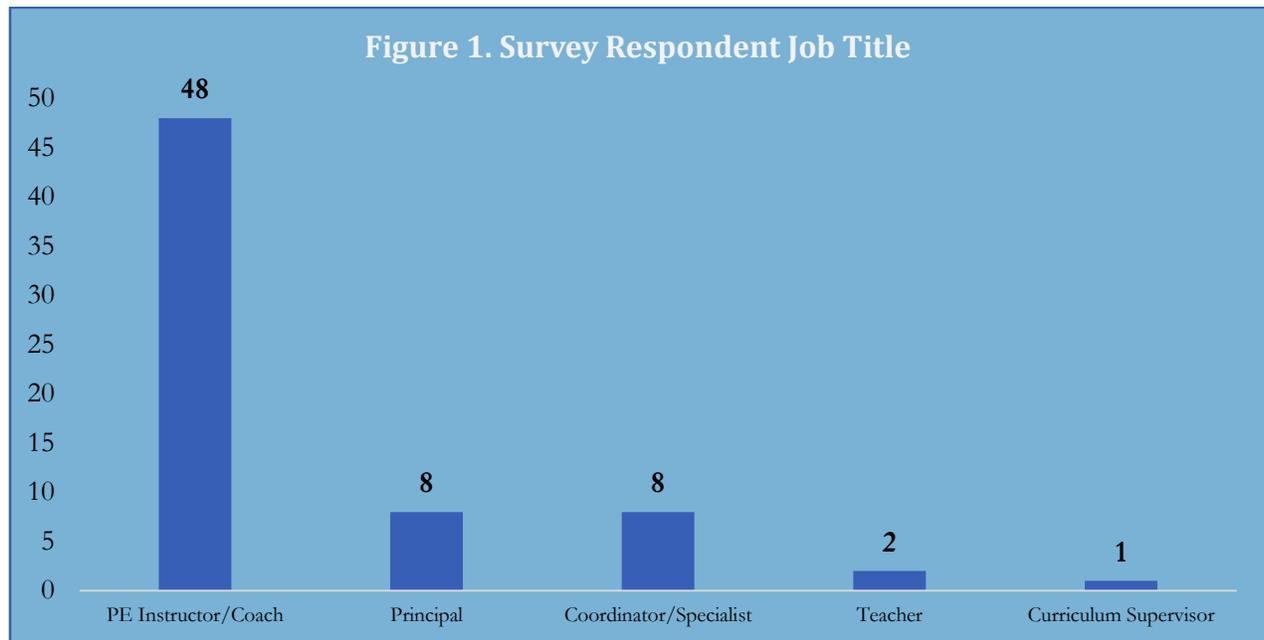
Methods

The methods of data collection used in this evaluation include surveys and targeted interviews based on survey findings. The following sections provide information regarding evaluation methodology.

Survey

In October 2013, CWIP participants were surveyed about their experience with the grant program. Respondents were identified using the Fitnessgram technical support contact lists provided by the ATSC, which were updated to reflect current contact information. Surveys were administered using Survey Monkey. Respondents were contacted by email and asked to participate. Follow-up reminder emails were administered in late-October and again in mid-November.

Of the 169 respondents contacted, 76 completed the survey (45 percent). Respondents were compensated for their participation with retail gift cards. Most participants were physical education (PE) instructors and coaches, principals, teachers, and school coordinators or specialists (see Figure 1).



Of the 76 completed surveys, nine were excluded due to incomplete or inaccurate responses. The survey questionnaire was complex and included open-ended, multiple-choice, and free-text questions. There was a significant degree of variation and missing information in the responses, resulting in limited quantitative data analyses.

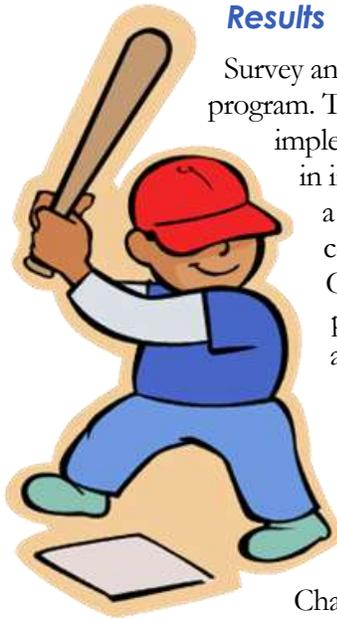
Survey questions focused on attendance and usefulness of summer training and technical assistance provided to CWIP grantees, implementation and usefulness of the three components of CWIP (i.e., SPARK, Fitnessgram, and HealthTeacher.com), physical and health education tools provided, quality and

quantity of physical activity offered to students, and the overall perceived impact of the CWIP program on student and school outcomes.

Interviews

Upon completion of the survey analysis, targeted interviews were arranged to gain more in-depth information to supplement survey findings. Primarily, interviews were meant to facilitate a narrative summary of program strengths and challenges to better inform future policies and similar programs aimed at improving child health and well-being. Of the eighteen respondents who agreed to participate in these interviews, ten respondents were selected. To provide a balanced response, participants were selected based on geographic location, grant cycle, and grades funded. Individualized interview guides were created with two main parts. First, a set of questions sought general feedback about program experiences and suggestions for improvement based on overall survey and evaluation results. Second, an individualized set of questions were developed based on the participant's survey responses and prior evaluation results. In March, participants were contacted by phone and a follow-up email was sent providing general information about the interview. Seven phone interviews were completed with CWIP school administrators ranging in length from one half-hour to an hour. The interviews were recorded and analyzed.

Results



Survey and interview data revealed a wide variety of experience with the CWIP program. The analyses demonstrated that there were both challenges and strengths in implementation of program components. The variation was driven by differences in institutional needs and existing resources. Furthermore, participants reported a need for greater oversight and communication and some specific program components were identified as obstacles to program implementation. Conversely, the program did have a positive impact on schools through the provision of needed resources including the SPARK curriculum, equipment, and new, innovative approaches to increasing students' physical activity.

Program Challenges

Two overarching challenges to program implementation were identified: insufficient institutional resources and program oversight (e.g., overall guidance and communication). These broader challenges contributed to constraints within the three specific program components.

Challenges to successful CWIP program implementation were partially explained by participants as a function of deficits in existing institutional resources and unique school needs. Specific challenges associated with institutional resources included limited availability of personnel. Coupled with growing student populations, many respondents reported limited staffing and high turnover as barriers to implementation. Four of the seven interview respondents cited staff turnover as a challenge. One stated, "You train these PE teachers... and then after a year or two they are gone." Further, some respondents indicated they have only one shared PE teacher for the whole district, while other resource-rich schools have five to six in each class during each PE period. For those with fewer PE teachers, every aspect of implementing CWIP was more difficult. Limited staffing was particularly detrimental to Fitnessgram assessments. Schools with large student populations and limited staff resources did not have sufficient personnel to administer assessments in a timely fashion. Additionally, staffing issues constrained the ability of schools to implement the requisite 120 minutes of physical education. Although schools with sufficient staff size were able to meet the activity requirements, other resource constraints were problematic. For example, one grantee stated, "We have five to six PE teachers every class, the biggest thing we run into in



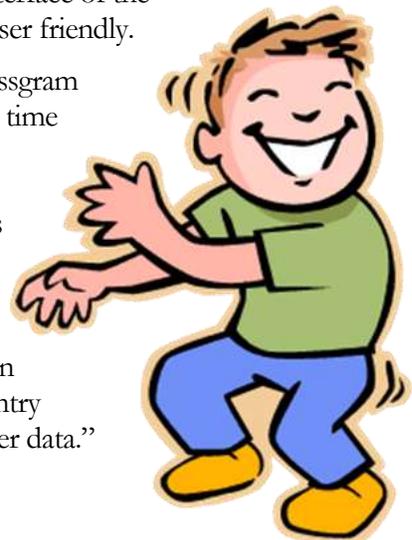
the winter months is our space because we only have one gym. We might have over 100 kids at a time but there are a bunch of certified staff members in the class.”

Interviews revealed perceived shortcomings in oversight, guidance, and communication as obstacles to the success of CWIP. Those interviewed consistently reported a need for clearly defined program requirements and greater consistency in the communication of expectations and oversight. For example, one participant stated, “... the accountability (piece) is critical to getting all components of the grant requirements completed,” and that CWIP would benefit from “... a grant administrator to hold people accountable.” The presence of this component could have made everything run more “smoothly.” Another interview participant further explained, “(grants coordinator) was constantly in contact with us. He was hands on, wanted to know what we needed... If we had questions he was quick to respond. That definitely worked well... Since that first year I haven’t heard from anybody.” Another added, “When

(he) was over it we could get answers. Everything was running smoothly... after he left it was like we were just in the wind.” Similar comments were found in survey responses, including statements like, “communication decreased significantly over the course of the grant.” In addition to a lack of guidance, technical assistance was noted as problematic, with approximately 30 percent of participants indicating that it was not very useful.

Both interview and survey respondents noted difficulties with specific program components. Of the three program components, HealthTeacher.com and Fitnessgram were most frequently cited as problematic. Approximately 37 percent of respondents surveyed reported that the HealthTeacher.com curriculum was not particularly helpful in administering health lessons. When interviewed, several participants stated that the curriculum was too complicated, not user friendly, and was generally disliked. One reason for this could be that participants did not receive proper training in using the curriculum. In surveys, 13 percent indicated they did not receive training at all. Of those who said they did receive training, three percent said it was not helpful. One person stated, “It was just a real fast training.” Several interview participants commented on the need for something that did not require extensive preparation time. Specifically, they were “looking for something they could just grab and teach without having to do a lot of preparing.” Additional statements included, “...actual lessons were too long... need HealthTeacher.com lessons to be more like mini lessons.” Other comments revolved around the user interface of the website and curriculum, where respondents wanted something more user friendly.

CWIP participants reported several challenges to completing the Fitnessgram assessments. Generally, they indicated that the assessment process was time consuming and inefficient. Some of the difficulties were attributed to frequent changes to the data entry tool and insufficient training. The most frequently cited obstacle was the amount of time the assessments took to complete. Survey data indicated that on average each school completed Fitnessgram assessments on 344 students, with an average assessment time of 20 minutes per student. However, 46 percent of respondents said assessments took 15 minutes or less per student. Even more experienced school personnel noted that assessments and data entry were time consuming, stating it took, “A good two full days just to enter data.”



Others described difficulties with the time frame for assessment, “The window to test is pretty short... You only have a month to do it... it can be difficult to get them all in.” There was inconsistency across schools in the Fitnessgram assessment process. Many schools indicated that when administering assessments they were only able to assess one student at a time. This resulted in down time for students, which were not an effective use of the scheduled physical education time. Other schools found creative ways of keeping students engaged during the assessment period by either having multiple stations set up for students to remain active or having additional staff available to help administer the assessments in a more timely manner.

While most participants reported an extremely positive experience with the SPARK curriculum, there were also some challenges noted. Namely, the requirement that students engage in 120 minutes of physical education per week using the SPARK curriculum was sometimes difficult. While interviewed personnel from two schools indicated that 120 minutes or more of PE each week had been scheduled prior to engaging in CWIP, the majority reported difficulties meeting this requirement, stating that it was a “little bit hard to get done,” or that the time factor was, “the biggest barrier.” In addition to the time issue, there were conflicting views of the SPARK equipment. While most school personnel found the equipment helpful, schools with already sufficient or plentiful PE equipment reported the equipment was sometimes redundant and of poor quality when compared to existing resources. The volume of students who used the equipment also had an effect on its perceived durability. Surveys indicated that 34 percent of schools did not have enough equipment for adequate participation of all students.

Program Strengths

While there were several challenges to program implementation, in general, school administrators gave positive evaluations of the CWIP program. They overwhelmingly expressed gratitude for the provision of much needed resources, equipment, and curriculum.

A clear strength of the CWIP program was the provision of financial resources to schools. Many respondents cited budgetary restrictions as key impediments to their physical education programs.

CWIP Innovators

In addition to implementing the core program components, some schools used the tools they received to find innovative ways to get kids moving. Here are a few ideas from CWIP Innovators.

Building on the Adventure to Fitness program, an educational fitness program introduced during CWIP trainings, a few schools found ways to incorporate physical activities presented on the website into daily core lessons through the use of “brain breaks.” Brain breaks are short burst of physical activity designed to allow students to move around and help keep them focused.

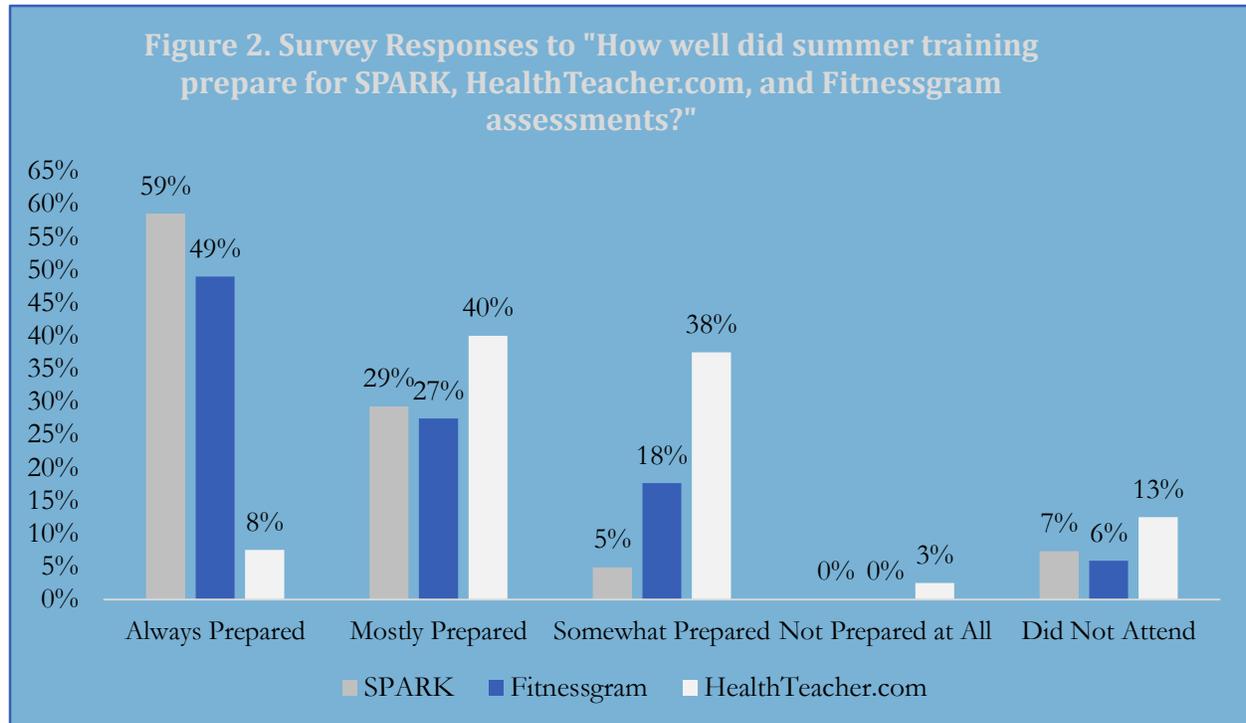
“We use the Adventure to Fitness program... every Wednesday. Sometimes the teacher will also use that website for brain breaks. I have also gone around the district and taught teachers to do quick... brain breaks that the teachers can lead the kids through.” – District PE Coordinator

“I got some brain breaks from one of the workshops that the CWIP program sent me to. [Teachers] do a lot of the brain breaks. I gave [teachers] different activities that they can do in the classroom from the SPARK curriculum, when they can't go outside for the day.” – PE Teacher

In one particularly active school, CWIP was just one part of a broader program to improve student health. In this school, administrators engage with a community volunteer program to provide before and after school physical fitness programming. As students arrive at the school they are encouraged to go to the gymnasium to get active using CWIP equipment. Many students take advantage of this opportunity; sometimes as many as 200 students are participating in before school exercise. In addition to CWIP, this school provides nutrition classes to students and engages both parents and other community members.

“We do some other things too... students before school engage in physical activity before the first bell. We sometimes have up to 200 students in the gymnasium every morning.” – Principal

Several interview participants stated that prior to CWIP they typically received between \$500 and \$1,000 per year for physical education equipment and curriculum for their entire school. Grant funding enabled the purchase of equipment and PE faculty training that otherwise would not have been possible. Survey findings indicated that summer trainings were useful in well-preparing participants for use of the SPARK curriculum and Fitnessgram tool (see Figure 2).



Along with financial resources, equipment provided by CWIP was extremely helpful to schools, particularly those with limited existing PE funding. As one interviewee succinctly put it, “Having equipment is key.” Many respondents reported that, prior to participation in CWIP, equipment was “very limited” and in many cases non-existent. For example, when asked about previous equipment used for PE, one school administrator stated, “What equipment!? ...A few balls, a volleyball net... pretty much very limited. A few hula-hoops, a few balls.” After receiving CWIP funds, school personnel reported that they had sufficient equipment to engage students in a diverse range of physical activities. One administrator said that they now have “oodles” of equipment, while another said that they could not “say enough great things” about the equipment.

“It’s really changed how we do PE...I love SPARK!”

Principal

Finally, it was clear from the survey and interview findings that the provision of a structured curriculum was a core strength of CWIP. While interviewees primarily cited the SPARK curriculum as efficacious, survey findings provided some support for the use of the HealthTeacher.com curriculum too, despite mediocre evaluation of the curriculum from interviewees. The SPARK curriculum was unanimously rated as extremely effective and greatly needed by program administrators. Appreciation for the evidence-based fitness program was echoed among a diverse range of school personnel with varying existing resources and needs. Program administrators stated that the SPARK training and curriculum radically altered the way they approached physical education. One said, for example, “It’s really changed how we do PE... I

love SPARK!” With an evidence-based, easy to use curriculum available, school personnel reported they were better able to access “the tools to do the job.” The curriculum proved to be particularly effective in resource-strained schools—where PE teachers multi-function as coaches and school administrators—by providing training for engaging students across a wide age range.

Recommendations

Overall, CWIP was reported to have a positive impact on students and administrators were pleased with the program. Survey and interview results also highlight several areas that could be improved upon if there were future programs developed with similar goals to that of CWIP. The following recommendations are grounded in the quantitative and qualitative findings summarized in this and the two prior evaluation reports. They are provided such that future funding entities or program administrators may have suggestions that are informed by research, though they may not acknowledge funding mechanism limitations. In general, these recommendations include the provision of streamlined and well-defined goals, flexibility to accommodate diverse sets of school needs, thorough initial and follow-up training, and the selection of program components that maximize child health and wellness outcomes.

One way to support the success of child health and wellness programs is to provide participants with a set of streamlined, clearly defined goals with measureable outcomes. The ATSC provided schools with such a set of requirements as part of a contract with school participants. This contract outlined the major requirements for program implementation, provided details about training and support that would be provided, and contact information for ATSC program staff who would be facilitating the program implementation. While the goals at the outset were clear to participants, survey and interview data revealed challenges in communication and follow-through across the three-year duration of the program that could be improved for future programs. For example, school contracts outlined a requirement that all students be assessed using the Fitnessgram tool in both the beginning and the end of each school year. By the end of the third year, however, only a fraction of students had a complete set of assessment data. Survey and interview results indicate that schools reported staff turnover rates, change in personnel at ATSC, and a general lack of an accountability structure to ensure that these data were adequately collected. Future programs could benefit from additional training opportunities for new staff and consideration of an accountability mechanism for schools to ensure successful completion of their requirements. For example, rather than providing all the program funding up front, schools could receive periodic compensation based on successful completion of sets of requirements.

Another way to improve future CWIP-type programming would be to recognize the diverse range of needs across different school populations. While this may not be within the scope of what a funder like ATSC is allowed to provide, given the variation in existing resources and needs of schools that participated in the program, funds could be allocated based on specific needs identified through the grant application process. For example, many school administrators reported receiving more funding than they thought they needed to buy equipment or found some of the equipment redundant due to their existing PE program; however they did have a shortage of personnel available to administer and record assessment data. In lieu of a one-size-fits-all approach, future programs might provide a menu of options for schools to select based on their needs.

Despite the reported challenges in CWIP implementation, the SPARK curriculum received an overwhelmingly positive response. Each of the interviewees said that they loved the SPARK curriculum. One even said when asked about recommendations for future programs like CWIP, “I would really focus more energy on SPARK.” Further, comments from the open-ended survey questions revealed similar findings. The majority of respondents made comments regarding the efficacy and positive experience they had with the curriculum. It provided support and structure for schools with limited staffing resources as well as a variety of activities for schools with other needs. SPARK met the goals of the program by

increasing the amount of physical activity that students received during PE. In fact, given limited resources, it is recommended that future programs focus on SPARK rather than try to include both SPARK and HealthTeacher.com. Feedback indicated that schools felt this component was less easy to implement and may not have been as clearly tied to measurable child outcomes.

The initial aim of the CWIP program was to improve child health and wellness by increasing rates of physical education among school-age children in Arkansas. Results from this evaluation suggest that while the SPARK and Fitnessgram components aligned well with this primary goal, HealthTeacher.com was more focused on improving student health behaviors. While important, these behaviors were not easy to systematically implement or to monitor individual student change. Given the level of detail in the SPARK curriculum and the complex nature of Fitnessgram assessments, future efforts may be better directed toward activities to enhance training for existing staff or support recruitment of additional staff to support program implementation for the SPARK and Fitnessgram components.

Part 4. Final Conclusions

CWIP was launched in 2010 through a collaboration of several state agencies, Arkansas Children's Hospital, and the Arkansas Center for Health Improvement, to promote health and wellness among Arkansas public school students. CWIP provided funding through three annual cycles to both elementary and middle schools across the state. Although prior evaluations suggest much success within the CWIP

program, they also revealed a number of challenges with program implementation and sustainability across time, including the collection of Fitnessgram data (the primary outcome measure for the program). The current evaluation provided greater insight into both the challenges and strengths in the implementation of CWIP. Overall, schools expressed gratitude for the provision of much needed resources, equipment, and curriculum. Challenges were articulated related to institutional resources and program oversight.

Recommendations for program improvement include a more explicit focus on SPARK and a menu approach to some specific program provisions to align with school and program needs. Such improvements are believed to help maximize the ability of schools to meet the physical education requirements in an effective manner. Decisions for planning and implementing future programs for similar interventions could use this report to guide program development.



