



New Orleans CATCH Coordinated School Health Initiative

Phase 2 Evaluation Report

Project Overview

The New Orleans CATCH project aims to increase physical activity and healthy eating, reduce obesity, and create health-promoting environments for approximately 18,000 students in 39 elementary schools in the Jefferson Parish Public School System (JPPSS). Jefferson Parish borders the city of New Orleans to the west and south and is the largest school system in Louisiana, educating nearly 50,000 students in pre-K to 12th grade. JPPSS serves a high percentage of low-income and minority youth – 78% eligible for free or reduced lunch, 41% African American, 24% Hispanic – factors associated with higher rates of overweight and obesity. Funded by a generous grant from the Humana Foundation, and in partnership with The University of Texas MD Anderson Cancer Center, [phase 1](#) of this project began in August 2016 with the implementation of CATCH in 8 schools (4,200 students) and concluded in July 2017. With ongoing support from the Humana Foundation, phase 2 expanded CATCH to an additional 15 elementary schools and 7,000 students during the 2017-2018 school year. A third phase, supported by a grant from Baptist Community Ministries, will bring CATCH to another 16 schools and 7,000 students during the 2018-2019 school year.

The CATCH Program consists of five main components: 1) Classroom lessons for each grade level on nutrition and physical activity; 2) Enhanced PE instruction and activities designed to maximize moderate-to-vigorous physical activity (MVPA); 3) Guidance and resources for creating a school nutrition environment that promotes healthy foods and reinforces classroom learning; 4) The CATCH Coordination Kit which provides a framework for collaboration among administrators, teachers, nutrition staff, parents, and other important stakeholders; and 5) Implementation training, technical assistance, and evaluation support.

Activities completed during phase 2 included:

- Establishing a CATCH Champion and wellness team on each of the 15 expansion campuses to spearhead and coordinate program efforts.
- Collecting baseline data including student surveys from 4th and 5th grade students and System for Observing Fitness Instruction Time (SOFIT) observations in a sample of PE classes.
- Providing CATCH implementation training workshops to the CATCH Champions and wellness teams and to PE teachers. CATCH teams and PE

teachers from phase 1 schools also attended the workshops for booster training.

- Providing each expansion school with CATCH materials including: K-5th grade classroom teacher manuals (includes parent/family materials), Eat Smart Guidebook for child nutrition staff, CATCH PE Guidebook and Activity Boxes, CATCH Coordination Kit, and PE equipment.
- Conducting at least one site visit per school, booster trainings for CATCH Champions and PE teachers, and a wrap-up/sustainability workshop with CATCH Champions. (Included phase 2 and phase 1 schools)
- Collecting post-implementation data including 4th and 5th grade student surveys, SOFIT observations, and CATCH Champion surveys in phase 2 schools.
- Collecting follow-up data including CATCH Champion surveys and 5th grade student surveys in phase 1 schools.

Data Collection Timeline

August 2017:	Student baseline survey (phase 2 schools)
September 2017:	SOFIT baseline observations (phase 2 schools)
October 2017:	CATCH Champion survey (phase 2 & phase 1 schools)
May 2018:	Student survey (phase 2 & phase 1 schools) SOFIT observations (phase 2 schools) CATCH Champion survey (phase 2 & phase 1 schools)

Evaluation Results – Phase 2 Schools

CATCH Champion Survey

Using the CATCH Coordination Kit as a guide, CATCH Champions and teams are responsible for building campus-wide support for CATCH, coordinating messages about healthy eating and physical activity throughout the school, assisting classroom and PE teachers with integrating CATCH into their lesson planning, and developing and implementing a sustainability plan to continue CATCH beyond the initial grant period.

As a process measure, CATCH Champions were surveyed in October 2017 regarding the implementation of CATCH best practices during the first 2 months of the program. CATCH Champions from 14 of the 15 expansion schools completed the survey. At that time, each of the schools had designated their CATCH team members and had met in person at least once. Several schools had already met 3 to 5 times. The schools had also begun displaying GO, SLOW, WHOA signage in their hallways and cafeteria; sharing information about CATCH with staff and parents; adding health-related messages to their school-wide announcements; and using the CATCH PE Activity Boxes. Five schools had begun teaching

CATCH nutrition lessons in at least some grade levels and thirteen of the schools had already held or were planning to hold a CATCH family event later in the year.

Owing to the unique strengths and challenges of each school community, campuses within the same district often progress to full implementation at varying speeds. As such, the October survey results were used to identify individual areas of need and to target additional training and technical assistance to the CATCH Champions and teams. Upon repeating the survey in May, twelve school responded and reported the following accomplishments:

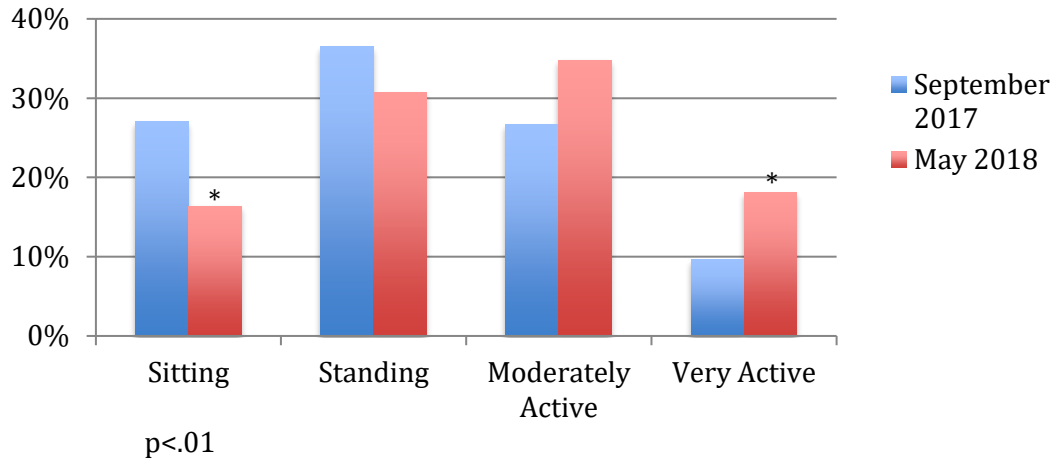
- Each school had a designated CATCH Champion and team with a variety of positions represented (e.g., administrator, PE teacher, child nutrition staff, classroom teacher, counselor, school nurse, community liaison/parent, student).
- Eleven of the 12 schools described their CATCH teams as being “Active” or “Somewhat Active”, with the teams meeting an average of seven times during the school year.
- All schools had GO, SLOW, WHOA and/or other CATCH signage on display. Half of the schools had promoted health through displays of student work (e.g. health-centered artwork).
- Ten of the 12 schools had included health messages in their school-wide announcements for students, with seven schools doing so at least once a month.
- All schools had provided health tips to parents through PTA meetings, newsletters, or other channels. Nine schools had held a CATCH family event with an average attendance of 118 people. Two other schools were planning an event before the end of the school year.
- Nine of the 12 CATCH teams had presented information on the CATCH classroom curriculum, CATCH PE activity boxes, GO/SLOW/WHOA foods, or given a CATCH overview to their school faculty.
- All schools were using the CATCH PE resources at least some of the time – eight schools were using them most or all of the time.

System for Observing Fitness Instructional Time (SOFIT)

The CATCH PE curriculum is designed to increase the amount time students are moderately-to-vigorously active, supporting national guidelines that children be engaged in moderate-to-vigorous physical activity (MVPA) for at least 50% of PE class time and participate in at least 60 minutes of MVPA each day.

To evaluate the impact of CATCH on MVPA, SOFIT observations were conducted in a sample of nine PE classes at baseline and repeated at the end of the school year (three classes each in three schools). The SOFIT tool assesses physical education practices by enabling direct observation and data collection on student activity levels and other class attributes. As shown in the chart below, students in observed PE classes spent 36% of class time in MVPA prior to CATCH implementation. Post-implementation, students in observed classes spent 53% of class time in MVPA, an increase of 47% (p=.01).

Percentage of PE Class Time by Activity Level



Student Survey

Twelve phase 2 schools administered surveys to their 4th and/or 5th grade students prior to CATCH implementation and again at the end of the school year.

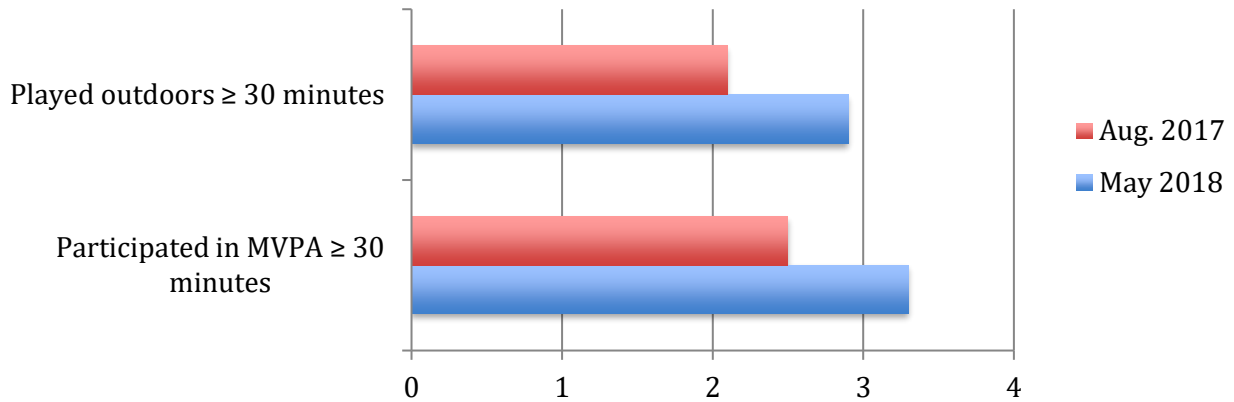
	August 2017	May 2018
Sample (n)	1,289	1,225
Grade: 4 th grade	604 (46.9%)	572 (46.7%)
5 th grade	685 (53.1%)	653 (53.3%)
Gender: Male	624 (48.7%)	592 (48.8%)
Female	657 (51.3%)	620 (51.2%)
Race & Ethnicity:		
White	223 (17.7%)	203 (16.7%)
Black	444 (35.3%)	385 (31.6%)
Hispanic	302 (24.0%)	325 (26.7%)
Asian or Pacific Islander	64 (5.1%)	78 (6.4%)
American Indian or Alaskan Native	16 (1.3%)	19 (1.6%)
Other	210 (16.7%)	209 (17.1%)

Physical Activity Outcomes:

- The average number of days per week in which students engaged in MVPA for at least 30 minutes increased from 2.5 to 3.3 (p<.001).
- The average number of days per week in which students played outdoors for 30 minutes or more increased from 2.1 to 2.9 (p<.001).
- There was no change in the number of hours per day that students spent watching TV. Time spent using a computer for activities other than school work and time spent playing video games increased from 2.4 to 2.7 hours and 2.1 to 2.4 hours, respectively (p<.01).

- The percentage of students agreeing that their PE teachers kept them moving always or almost always increased from 68.7% to 76.4% ($p < .001$).

Average number of days per week students were physically active



Nutrition Outcomes:

- The average number of times the students ate fruit on the previous day increased from .96 to 1.11 ($p < .001$). The percentage of students who reported eating no fruit on the previous day decreased from 41% to 35%.
- The average number of times the students drank a glass or bottle of water on the previous day increased from 1.6 to 1.9 ($p < .001$).
- Overall, there was no change in the number of times students ate vegetables on the previous day or in mean scale scores for healthy and unhealthy food consumption. When stratified by school, however, half of the schools showed a positive trend toward increased vegetable intake and/or overall healthy food consumption with three schools showing statistically significant improvements on one or both of these measures.

Health Beliefs:

Students were asked to rate their level of agreement (0 = disagree, 1 = in between, 2 = agree) with three statements in the health belief scale:

- If I eat healthy foods most of the time, I will have fewer health problems.
- If I am physically active everyday, I will have fewer health problems.
- If I am overweight, I am more likely to have more health problems like cancer or heart disease.

From pre- to post-CATCH implementation, there was a significant increase in mean scale score of 3.9 to 4.2 indicating greater agreement with the above statements ($p < .001$).

Evaluation Results – Phase 1 Follow-up

CATCH Champion Survey

The eight phase 1 schools, which first implemented CATCH in 2016-2017, continued receiving implementation support in 2017-2018, although to a lesser degree than the phase 2 expansion schools. To assess the ongoing activities of these CATCH teams and to understand how the phase 1 schools are working to sustain CATCH, CATCH Champion surveys were administered in May 2018. Six schools completed the survey and, as evidenced by the following results, continued to implement and expand on their program activities in their second year:

- All schools had maintained their CATCH teams with a wide variety of positions represented. The teams had met an average of five times since the beginning of the school year.
- All schools continued to display GO, SLOW, WHOA and other CATCH signage in their cafeterias and hallways. Two schools had labeled the foods on their cafeteria serving line as GO, SLOW, or WHOA.
- All schools had shared information with parents and staff about CATCH, provided health tips to parents, promoted the CATCH Theme Days (Water Wednesday, Fruity Friday, etc.), promoted health through displays of student work, and included health-related messages in their school-wide announcements for students.
- All schools continued to use the CATCH PE materials at least some of the time – four schools were using them most of the time.
- The schools continued to work towards incorporating classroom nutrition lessons – four of the schools reported a specific plan for teaching the lessons with these plans being somewhat (2) or mostly (2) implemented.
- Five schools had held a CATCH family event during the school year with an average attendance of 260 people. The remaining school was planning an event before the end of the school year.

Student Survey

Six phase 1 schools administered follow-up surveys to their fifth grade students who also completed the survey at the start and end of their fourth grade year.

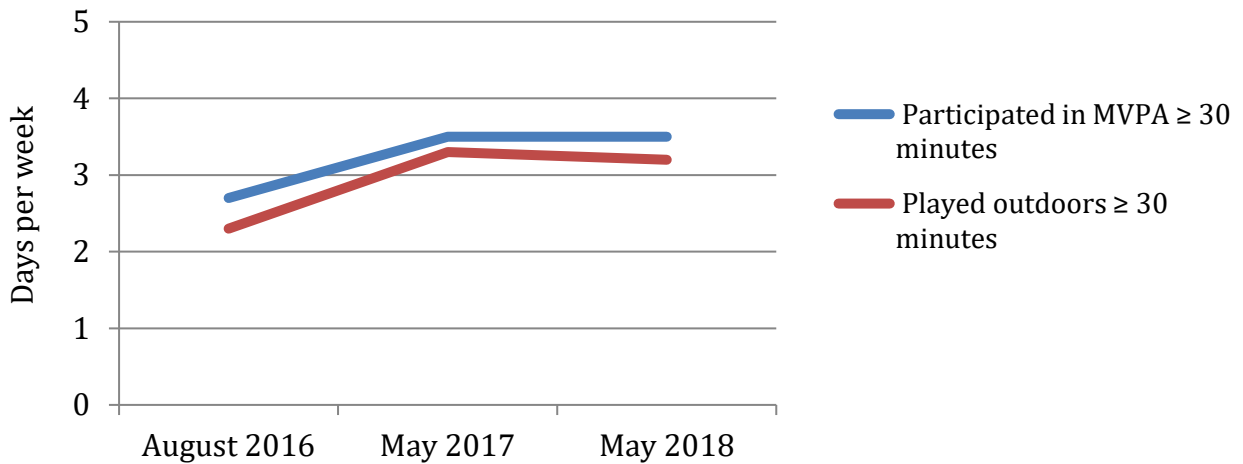
	August 2016	May 2017	May 2018
Sample (n)	451	398	374
Grade: 4 th grade	451 (100%)	398 (100%)	0 (0%)
5 th grade	0 (0%)	0 (0%)	374 (100%)
Gender: Male	225 (50%)	181 (46.1%)	177 (47.8%)
Female	225 (50%)	212 (53.9%)	193 (52.2%)
Race & Ethnicity:			
White	50 (11.1%)	37 (9.3%)	34 (9.1%)
Black	183 (40.8%)	154 (38.7%)	143 (38.2%)

Hispanic	133 (29.6%)	142 (35.7%)	119 (31.8%)
Asian or Pacific Islander	16 (3.6%)	15 (3.8%)	12 (3.2%)
American Indian or Alaskan Native	9 (2.0%)	5 (1.3%)	3 (0.8%)
Other	58 (12.9%)	45 (11.3%)	63 (16.8%)

Physical Activity Outcomes:

- The average number of days per week in which students engaged in MVPA for at least 30 minutes was maintained. Students were physically active an average of 2.7 days per week at baseline, 3.5 days per week at post-test ($p < .001$), and 3.5 days per week ($p < .001$) at follow-up.
- The average number of days per week in which students played outdoors for 30 minutes or more was also maintained. Students reported playing outdoors for 30 minutes or more on 2.3 days per week at baseline, 3.3 days per week at post-test ($p < .001$), and 3.2 ($p < .001$) days per week at follow-up.

Average number of days per week students were physically active



Nutrition Outcomes:

- The average number of times the students ate vegetables on the previous day did not change significantly between the three time points.
- The average number of times the students ate fruit on the previous day decreased from 1.3 at baseline and post-test to 1.0 at follow-up ($p < .001$).
- The mean scale score for healthy food consumption decreased from 5.3 at baseline and 5.0 at post-test to 4.3 at follow-up ($p < .05$).
- The mean scale score for unhealthy food consumption did not change significantly between the three time points.

Health Beliefs:

Students were asked to rate their level of agreement (0 = disagree, 1 = in between, 2 = agree) with three statements in the health belief scale:

- If I eat healthy foods most of the time, I will have fewer health problems.
- If I am physically active everyday, I will have fewer health problems.
- If I am overweight, I am more likely to have more health problems like cancer or heart disease.

The mean scale score for the health belief scale increased significantly from 3.8 at baseline to 4.2 at post-test (indicating greater agreement with the above statements) and remained 4.2 at follow-up ($p < .001$).