

New Orleans CATCH Coordinated School Health Initiative

Phase 1 Evaluation Report

"The CATCH program is awesome. We are all practicing healthy habits with our food choices, physical activity, and social and emotional wellbeing." - Principal, Chateau Estates Elementary School

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 40 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 is expanding CATCH to an additional 16 elementary schools and 7,000 students during the 2017-2018 school year. An anticipated third phase 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, physical activity, and screen time reduction; 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 1 included:

- Establishing a CATCH Champion and wellness team on each of the 8 campuses to spearhead and coordinate program efforts.
- Collecting pre-implementation data including student surveys from 4th and 5th grade students and SOFIT (System for Observing Fitness Instruction Time) observations in a sample of PE classes.

- Providing CATCH implementation training workshops to the CATCH Champions and wellness teams and to all PE teachers.
- Providing each 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.
- Collecting post-implementation data including 4th and 5th grade student surveys, SOFIT observations, and CATCH Champion surveys.

Data Collection Timeline

August 2016:	Pre-post teacher training survey
September 2016:	Student survey and SOFIT observations
October 2016:	CATCH Champion survey (process measure)
March – April 2017:	CATCH Champion survey and SOFIT observations
May 2017:	Student survey

Evaluation Results

Teacher Training Survey

The Teacher Training Survey was administered prior to CATCH implementation training, conducted in August, and repeated immediately post training to assess changes in CATCH knowledge and implementation confidence. Thirty-one teachers completed both the pre and post training surveys. Primarily, survey questions were divided into two scales:

Implementation Confidence Scale. Questions on this scale asked the teacher to rate his or her confidence level (1 = not at all confident to 5 = very confident) for changing the school health environment, implementing CATCH components, demonstrating activity breaks, convening the CATCH team every six weeks, leading CATCH team meetings, facilitating/teaching CATCH lessons, and using the Coordination Kit.



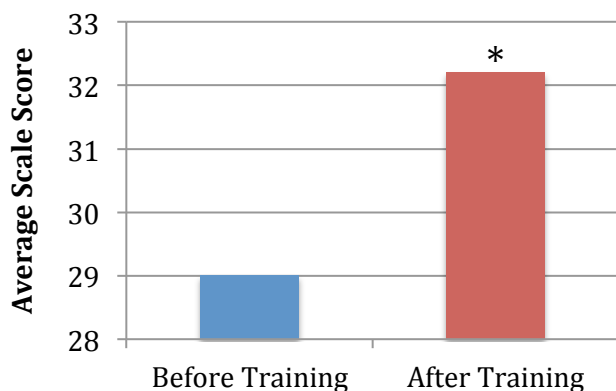


Beliefs Scale. Questions on this scale asked the teacher to rate his or her agreement (1 = strongly disagree to 5 = strongly agree) with statements such as: I understand my role on the CATCH team; Students will enjoy CATCH activities; CATCH can positively impact students' health behavior; I can motivate students' physical activity and healthy eating through my own behavior and encouragement; Activity breaks can be incorporated into class time.

As shown in the following charts, there was a significant increase in teachers' implementation confidence and positive beliefs about CATCH following implementation training. Additionally, the teachers were asked to rate their motivation for implementing CATCH with "1" being extremely unmotivated and "10" being extremely motivated. From pre to post training, teacher motivation increased from a mean score of 8.5 to 9.2 ($p < .05$).

CATCH Implementation Confidence

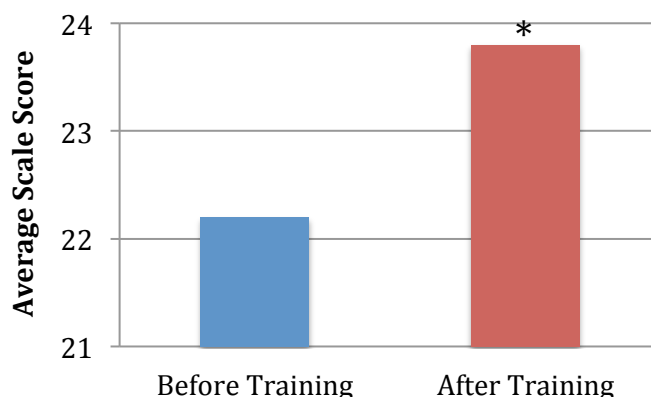
(possible scale score range: 7 - 35)



* $p < .001$

Positive Beliefs about CATCH

(possible scale score range: 5 - 25)



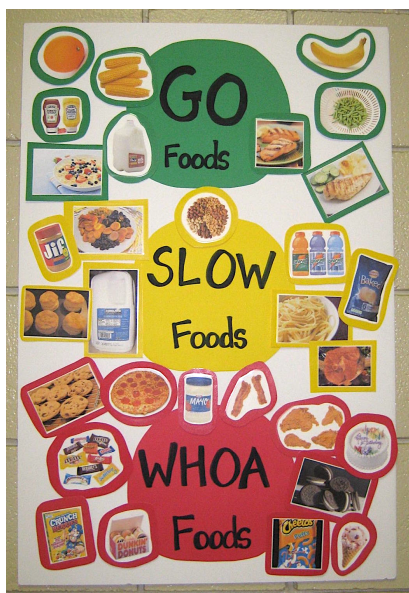
* $p = .001$

"The presentation and training was excellent... Loved the activities – great ideas to change the way our students think about food... I will bring the information back to school and share with my peers (also with my family). I will also try to be more aware of my eating habits and how they influence others." – Teacher comment from training survey

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 evaluation measure, CATCH Champions were surveyed in October 2016 regarding the implementation of CATCH best practices during the first 2 months of the program. At this time, all schools had designated their CATCH team members and had met in person an average of 3 times. The schools had also begun displaying GO, SLOW, and WHOA signage; sharing information about CATCH with staff and parents; adding health-related messages to their school-wide announcements; and using the CATCH PE Activity Boxes. Four of the schools had begun teaching CATCH nutrition lessons in at least some grade levels and two of the schools had already held a CATCH family event.



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 five months later, the schools had accomplished the following:

- All schools had designated a CATCH Champion and team consisting of at least one administrator, PE teacher, and nutrition services representative. Most teams included additional personnel such as classroom teachers, counselors, school nurses, and parents.

- All schools had GO, SLOW, WHOA and other CATCH signage on display. Seven schools had promoted health through the display of student work (e.g. health-centered artwork).
- All schools were including health messages in their school-wide announcements at least once a month. Three schools were doing so weekly.
- All schools had provided health tips to parents through PTA meetings, newsletters, or other channels. Five schools had held a CATCH family event with an average attendance of 170 people. The remaining three schools were planning an event before the end of the school year.
- All schools had distributed “Caught You Being Healthy” postcards to promote healthy physical activity and nutrition behaviors. Six schools had also promoted CATCH theme days (Water Wednesday, Fruity Friday, etc.).
- All schools were using the CATCH PE resources at least some of the time – five schools were using them most of the time. All schools reported that students were engaging in MVPA for at least 50% of PE class time most or all of the time.
- Six schools had a plan for teaching the CATCH nutrition lessons that had been partly or mostly implemented. In some schools, the CATCH team was taking an active role in scheduling the lessons (i.e. weekly, monthly) whereas in other schools the lessons were being taught at the classroom teachers’ discretion.

“Kindergarten through 2nd grade has implemented the program at a high level. Our testing grades 3rd, 4th, and 5th participated in all of our events, poster contest. They have also implemented brain breaks in the classroom. As a school we have done well in the cafeteria and at PE with the implementation of CATCH. Our Family fun night was a huge success!!!”
– CATCH Champion, Cherbonnier-Rillieux Elementary School

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.

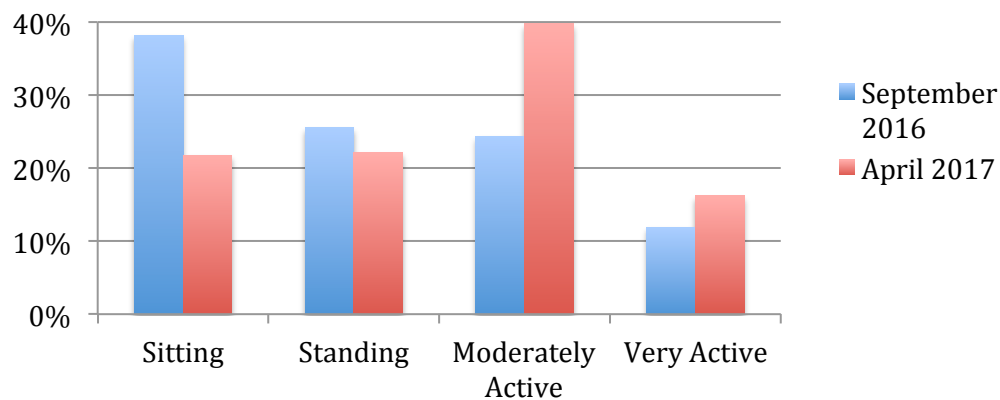
To evaluate the impact of CATCH on MVPA, SOFIT observations were conducted in a sample of PE classrooms pre- and post-implementation in one school and post-implementation only in a second school. The SOFIT tool assesses physical education practices by enabling direct observation and data collection on 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 in the same school spent 56% of class time in MVPA. In the post-test only school, students engaged in MVPA for 63% of class time as a result of CATCH activities.

"We love all the CATCH Activities provided for the PE class. As the PE teacher, we learned so many more ways to keep the kids moving. We do 'Hit the Track' everyday. The kids really enjoy playing Dragon's Tail. The kids are excited about all of the new CATCH Equipment and look forward to learning new games about GO, SLOW and WHOA foods." – PE teacher & CATCH Champion, William Hart Elementary School

Percentage of PE Class Time by Activity Level



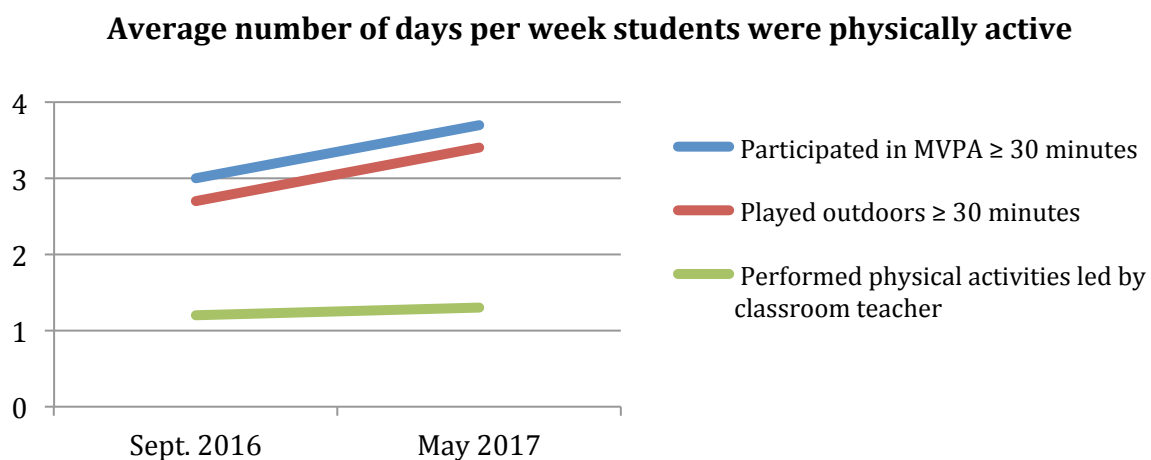
Student Survey

Student surveys were administered to 4th and 5th grade students in the eight schools prior to CATCH implementation and again at the end of the school year.

	September 2016	May 2017
Sample (n)	1,112	977
Grade: 4 th grade	613 (55.1%)	539 (55.2%)
5 th grade	499 (44.9%)	438 (44.8%)
Gender: Male	552 (49.9%)	481 (49.7%)
Female	554 (50.1%)	487 (50.3%)
Race & Ethnicity:		
White	157 (14.2%)	129 (13.2%)
Black	466 (42.1%)	373 (38.3%)
Hispanic	295 (26.6%)	305 (31.3%)
Asian or Pacific Islander	42 (3.8%)	32 (3.3%)
American Indian or Alaskan Native	22 (2.0%)	7 (0.7%)
Other	125 (11.3%)	129 (13.2%)

Physical Activity Outcomes:

- The average number of days per week in which students engaged in MVPA for at least 30 minutes increased from 3.0 to 3.7 ($p<.0001$).
- The average number of days per week in which students played outdoors for 30 minutes or more increased from 2.7 to 3.4 ($p<.0001$).
- There was a small increase in the average number of days per week in which students reported doing physical activities led by their classroom teachers (not including PE) from 1.2 to 1.3, although this was not statistically significant.
- Students did not report a change in screen time habits, including playing video games or watching TV.



Nutrition Outcomes:

- There was a significant increase in mean water consumption on the previous day from 1.6 bottles or glasses per day to 1.8 per day ($p<.01$).
- The mean number of times students drank diet soda or soft drinks the previous day decreased from .3 to .2 ($p<.001$); there was not a significant change in regular soda consumption.
- Overall, there were not significant changes in the consumption of foods classified as healthy or unhealthy. Healthy foods included lean meats (baked, grilled, or boiled chicken or fish), whole grains, beans, nuts, vegetables, and fruit. Unhealthy foods included higher fat or processed meats (hamburger, hot dogs, sausage, steak, bacon, ribs), fried meats, French fries and chips, processed or “white” grains, and sweets (doughnuts, cookies, cake, candy, etc.). When the results were stratified by school, however, several schools showed positive trends toward increased consumption of healthy foods and decreased consumption of less healthy foods, although not to the level of statistical significance. Interestingly, these were schools that, based on CATCH Champion reports, had a highly active CATCH team or had developed and

implemented a plan to teach CATCH nutrition lessons at regularly scheduled intervals across grade levels.

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 ($p = .001$).

Conclusions

There has been strong enthusiasm for CATCH within each of the eight schools, from PE and classroom teachers to child nutrition staff to school principals. Results from the CATCH Champion surveys as well as direct observations during site visits and informal feedback from school staff reveal the implementation of numerous CATCH best practices and widespread support for creating a healthy school environment. Additionally, the CATCH PE curriculum was quickly put into practice with a majority of the schools using this resource most of the time, thereby increasing the amount of time children engage in MVPA.

Although most teachers recognize the importance of nutrition education for their students, the CATCH classroom curriculum has been implemented with less consistency across schools. The multiple demands on teachers' time and, in the older grades, a focus on standardized testing often present a challenge for schools trying to integrate a new classroom curriculum. As noted in the student survey results above, there were positive trends in nutrition outcomes when the CATCH Champion or team more actively supported teachers in scheduling and delivering nutrition lessons. Based on this "lesson learned", additional strategies for CATCH teams to support classroom teachers will be incorporated into the trainings for phase 2 of this project.

Based on the progress achieved thus far, we expect the phase 1 schools to continue strengthening their CATCH implementations over the next school year leading to further improvements in nutrition and physical activity outcomes for students. These schools will also serve as models and their CATCH Champions as mentors for the 16 phase 2 schools, thereby increasing collaboration between schools and providing another level of support. Additionally, JPPSS is in the process of hiring a district-level CATCH Coordinator who will oversee and support the schools, further facilitating the successful implementation and long-term institutionalization of CATCH.

Publicity Highlights

To raise awareness and support for this project within the New Orleans community and to recognize the generosity of the Humana Foundation, we have conducted the following media outreach:

- Press release announcing our partnership with the Humana Foundation to implement CATCH in the Jefferson Parish Public School System:
<http://catchinfo.org/catch-nola/>
- News story on the Jefferson Parish Public School System's website:
<http://jpschools.org/new-partnership-promotes-healthy-living-to-jppss-students/>
- News story in *The New Orleans Advocate*:
http://www.theadvocate.com/new_orleans/news/communities/crescent_city/article_688df060-79ed-11e6-9b0a-9b91668e6c30.html?sr_source=lift_amplify
- News story in *The Times-Picayune/Nola.com*:
http://blog.nola.com/eastjefferson/2016/10/kenner_school_implements_welln.html
- Frequent updates about the project through our social media channels including Twitter, Facebook and the CATCH newsletter and blog. To view these items, please go to: <http://catchinfo.org/new-orleans-coverage/>