Ysleta ISD CATCH Coordinated School Health Initiative

Phase 1 Evaluation Summary

Project Overview

The Ysleta ISD CATCH project aims to increase physical activity and healthy eating, reduce obesity, and create health-promoting environments for approximately 18,500 students in 37 elementary schools in the Ysleta Independent School District. Ysleta ISD is located within the city of El Paso and serves a community that is primarily Hispanic (92%) and economically disadvantaged (81%), key risk factors associated with higher rates of physical inactivity and obesity. Funded by a generous grant from Blue Cross and Blue Shield of Texas, and in partnership with The University of Texas MD Anderson Cancer Center, phase 1 of this project began in August 2015 with the implementation of CATCH in 14 schools (7,500 students) and concluded in July 2016. Phase 2 is expanding CATCH to the remaining 23 elementary schools during the 2016-2017 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 14 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 as needed.
• Conducting at least one site visit per school and a wrap-up/sustainability workshop with CATCH champions.
• Collecting post-implementation data including 4th and 5th grade student surveys, SOFIT observations in the PE class sample, and CATCH Champion surveys.

Data Collection Timeline

August 2015: Pre-implementation data collection including student survey and SOFIT observations; Pre-post teacher training survey
February 2016: CATCH Champion survey (process measure)
March 2016: Repeat SOFIT observations
May 2016: Repeat student survey and CATCH Champion 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-seven 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 statistically significant increase in teachers’ implementation confidence and positive beliefs about CATCH following implementation training.

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 February 2016 regarding the implementation of CATCH best practices during the first 5 months of the program. As noted in the following survey highlights, the level of implementation achieved by the schools was variable:

- A wide variety of positions were represented on the CATCH teams including PE teachers, classroom teachers, administrators, nutrition services staff, health services/nurse, counselors, community partners, parents, and students.
- A large majority of CATCH teams (11 out of 14) had met at least once every six weeks.
- All but one school had included health messages in their school-wide announcements. Two schools included health messages daily and eight schools included messages at least once a month.
- All schools had CATCH-related signage in their hallways and/or cafeteria.
- All schools reported using the CATCH PE resources with eight schools using them most or all of the time.
- Twelve schools held or were in the process of planning a Family Fun Night or other community event.

Owing to the unique strengths and challenges of each school community, campuses often progress to full implementation at varying speeds. The mid-year survey results were used to target additional training and technical assistance to meet the individual needs of each CATCH Champion and team. Upon repeating the CATCH Champion survey 2-3 months later, the following improvements were seen:

- The average number of times the CATCH teams had met in person increased from 2.9 to 3.3.
- 11 schools included health messages in their daily announcements at least once a month.
• 57% of schools had distributed information about CATCH to parents compared to 43% previously.
• 64% of schools had promoted CATCH theme days compared to 50% previously.
• 71% of schools had provided physical activity opportunities for students before and/or after school (not including athletics) compared to 57% previously.

**System for Observing Fitness Instructional Time (SOFIT)**

To evaluate the impact of CATCH on students’ MVPA engagement during physical education, pre and post SOFIT observations were conducted in a sample of PE classes in two elementary schools. The SOFIT tool assesses physical education practices by enabling direct observation and data collection on student activity levels and other class attributes. Prior to CATCH implementation, students in observed PE classes spent 43% of class time engaged in MVPA. Post-implementation, students in observed classes engaged in MVPA for 66% of class time, a statistically significant increase of 53%.

**Percentage of PE Class Time Spent in MVPA**

![Bar chart showing percentage of PE class time spent in MVPA from August 2015 to March 2016.](chart)

* p < .001

As shown in the charts that follow, CATCH has led to a decrease in the proportion of PE class time spent on classroom management activities, during which students are often standing still, and an increase in game play in which students are moderately or vigorously active.
Percentage of PE Class Time by Lesson Category

* p < .05

Percentage of PE Class Time by Activity Level

* p < .05
**Student Survey**

Eight of the 14 phase 1 schools administered pre and post surveys to their 4th and 5th grade students. Five schools administered pre and post surveys to their 5th grade students only. One school did not complete the post student surveys and was not included in the data analyses.

<table>
<thead>
<tr>
<th></th>
<th>September 2015</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample (n)</td>
<td>1,453</td>
<td>1,427</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th grade</td>
<td>534 (36.8%)</td>
<td>488 (34.2%)</td>
</tr>
<tr>
<td>5th grade</td>
<td>919 (63.2%)</td>
<td>939 (65.8%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>733 (50.6%)</td>
<td>741 (52.1%)</td>
</tr>
<tr>
<td>Female</td>
<td>715 (49.4%)</td>
<td>682 (47.9%)</td>
</tr>
<tr>
<td>Race &amp; Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>403 (28.1%)</td>
<td>281 (19.8%)</td>
</tr>
<tr>
<td>Black</td>
<td>76 (5.3%)</td>
<td>62 (4.4%)</td>
</tr>
<tr>
<td>Hispanic*</td>
<td>691 (48.1%)</td>
<td>899 (63.4%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>10 (0.7%)</td>
<td>11 (0.8%)</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>37 (2.6%)</td>
<td>23 (1.6%)</td>
</tr>
<tr>
<td>Other</td>
<td>219 (15.3%)</td>
<td>143 (10.1%)</td>
</tr>
</tbody>
</table>

* The district is 93% Hispanic, so it is probable that many of the students who identified as white and other are also Hispanic.

**Nutrition Outcomes:**

- There was a statistically significant increase (p<.001) in mean score on the healthy food consumption scale from 3.8 to 4.4. Healthy foods included: baked, grilled, broiled, or steamed fish or chicken; whole wheat breads or tortillas; vegetables; and fruit. There was no change in unhealthy food consumption which included: hamburger meat, hot dogs, sausage, steak, bacon, or ribs; fried meats; French fries or chips; white breads or tortillas; sweet rolls, doughnuts, cookies, brownies, pies, or cake; candy; and frozen desserts.

- The mean number of times students consumed milk the previous day increased from 1.3 to 1.4 (p<.01). Among milk drinkers, there was a decline in the percentage of students who typically drank whole milk (43.2% to 35.7%) and an equivalent increase in the number of students who typically drank low-fat or skim milk (56.8% to 64.3%), indicating that 7.5% of milk drinkers made a switch to the healthier alternative (p<.001).

- The percentage of students who reported drinking no water the previous day declined from 12.1% to 9.4% while the percentage of students who drank at least 3 servings of water increased from 44% to 52% (p<.001).
• The mean number of times students ate fruits and vegetables the previous day increased significantly from 1.5 to 1.8 and 1.3 to 1.6, respectively (p<.001).

• There was no change in sugar sweetened beverage consumption, including sodas, fruit-punch, and sports drinks.

**Type of milk students drink most of the time**

<table>
<thead>
<tr>
<th>Type of Milk</th>
<th>Sept. 2015</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole milk</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Low-fat or skim milk</td>
<td>60%</td>
<td>70%</td>
</tr>
</tbody>
</table>

**Average number of times students ate fruits & vegetables the previous day**

<table>
<thead>
<tr>
<th>Type</th>
<th>Sept. 2015</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Vegetables</td>
<td>1.0</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**Physical Activity Outcomes:**

• There were significant increases in the mean number of days per week that students engaged in moderate-to-vigorous physical activity for at least 30 minutes (4.1 to
4.7), played outdoors for at least 30 minutes (3.5 to 4.0), and practiced or played sports (3.1 to 3.6), p<.001.

- The average number of hours per day spent watching TV, DVDs, or videos when not in school decreased significantly from 2.1 to 1.9 (p=.01).

### Health Beliefs and Self-Efficacy Outcomes:

- The health beliefs scale included 3 statements:
  - When I eat healthy foods, I have more energy to do the things I want to do.
  - If I eat healthy foods most of the time, I will have fewer health problems.
  - If I run and play everyday, I will have fewer health problems.

A higher score on the scale (range: 3-9) indicates greater agreement with these statements. From pre to post-test, there was a significant increase in mean score from 7.4 to 7.7 indicating greater agreement (p<.001).

- The self-efficacy scale included a series of questions asking the students how sure they were that they could be physically active and choose healthy over unhealthy food options. From pre to post-test, the mean self-efficacy score for physical activity increased from 10.2 to 10.6 and the mean self-efficacy score for nutrition increased from 9.0 to 9.5, p<.001. (possible score range: 4-12)

### Publicity Highlights

To increase awareness of the Ysleta ISD CATCH project in the greater El Paso community and to acknowledge the generous support of Blue Cross and Blue Shield of Texas, we have accomplished the following media outreach activities:
• We distributed a news release announcing our partnership with Blue Cross and Blue Shield of Texas to implement CATCH in Ysleta ISD.
• The El Paso Times, which has a daily readership of 213,000 people, published an article on the project.
• Fox 59 El Paso, Univision, and KVIA TV each featured news stories about the project.
• We have provided frequent project updates on social media including Twitter, Facebook, Flickr, and the CATCH blog. To view these items, please go to: http://catchinfo.org/bcbstx-ysleta-interactions/