



Case Study Hamden, CT

Students in *C8Kids* More Likely to See Large Gains on Test Scores

Implementation Setting

Helen Street Elementary School is a neighborhood elementary school in the city of Hamden. The student body is comprised of 45% African American, 23% white, and 23% Hispanic students – more than half of the students receiving free or reduced-price lunch. Helen Street is not the lowest performing school in Hamden, Connecticut, “...but we’re in the bottom group and have been for years,” said Principal Mike Lorenzo. While the school’s academic achievement has gone up in the two years Lorenzo has been principal, its diverse socioeconomic population carries some issues that make academic improvement more difficult.

One of the biggest obstacles Lorenzo observed was the problem students had retaining information. “We saw it in how they finished one school year and started the next.” What happens during the summer? What happens during vacations? “They knew the material when we had them,” said Lorenzo. “But when we went back over it after any period of time, a number of our students had a hard time retaining the information. So a program like *C8Kids*, which is designed to improve a child’s ability to think, focus and learn, was something we needed to explore to see if it made sense for us.”

It’s critical for schools like Helen Street to focus on improving academic achievement on the state’s mastery tests, called CMTs. “I hate to push the fact that we are so concerned about the tests, but that is the benchmark that we as a school are measured against,” Lorenzo explained. “And when students have difficulty with retention and have a hard time

focusing in class, it puts the whole rigor and cadence of instruction on hold.”

The school started the academic year with only one-third of its students on grade level for reading. “Starting the year with two-thirds of our kids not reading at grade level puts us in a constant state of catch-up,” said Lorenzo. “We have to not only keep the kids that we have on grade level, at grade level, but catch up the students that aren’t on grade level. Exponentially what happens is that every day they are not caught up, means nearly two days of harder work to get them caught up. If the *C8* program could help, it would have a tremendous impact on the entire school.”

The hope that *C8Kids* would strengthen a student’s cognitive skills and ability to recall information was the catalyst for Helen Street School to become an early adopter of the program. “What gave me confidence in *C8 Sciences* was Dr. Wexler and the outstanding work he’s done at Yale University on cognitive development,” said Lorenzo. “The deep concern people at *C8* have for helping out kids like my kids... kids that are coming in with a burden that a lot of other kids don’t have, threw me over the top. I knew if Dr. Wexler put himself behind this program, then it’s something that’s got to work, and it’s something that my kids would really benefit from.”

Implementation Strategy:

C8Kids ran from October to February as an afterschool program for students in 2nd and 3rd grade, meeting every Monday, Tuesday and Wednesday. Students met in a classroom for snack,

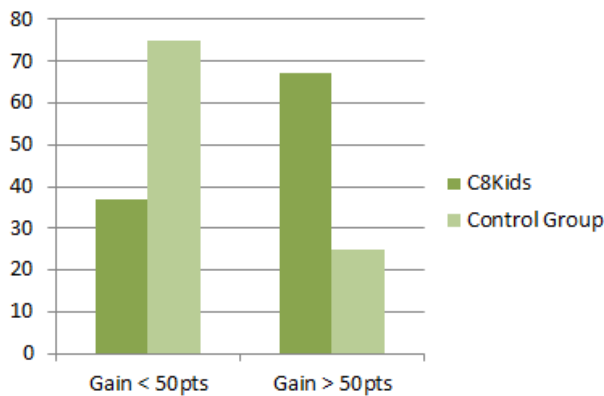
then walked as a group to one of the school's two computer labs for 45 minutes of computer-based exercises. Once every student completed their training regimen for the day, the group walked to the gym for 45 minutes of physical exercises. The program was led by one of the 3rd grade teachers, with support from a teenage volunteer assistant.

Approximately twice the number of students applied for the program as could be accepted, so those who applied were divided into two similar groups, one of which became a control group for comparison to kids in the C8 afterschool program.

Results:

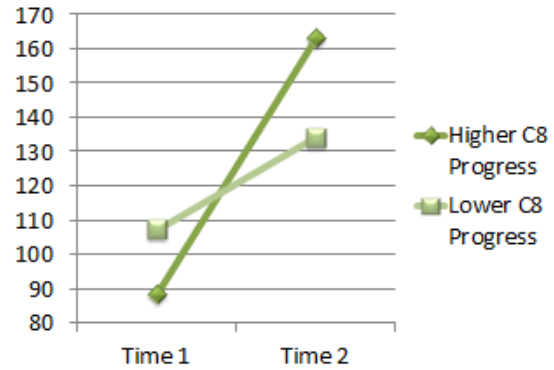
The Blue Ribbon practice standardized test was administered to students in both treatment and control groups at the beginning and end of the program period.

Children in the C8Kids group showed greater improvement in key components of the Blue Ribbon standardized tests that measured executive functioning (described below):



Children in the C8 group were 2.5X as likely to show a 50 pt gain as were children in the control group. Difference between groups significant by Chi-Square at p<.03 (one-tail)

Children who made more progress on the C8 exercises were more likely to show gains of more than 50 points on the "Integrated Understandings" (Math) and "Forming a General Impression" and "Developing an Interpretation" (Reading) subtests of the Blue Ribbon standardized tests.



(chi-square significant at p = .034, one-tailed).

Testimonials:

The C8Kids program has been well received by staff, students, and parents. "We have kids on a waiting list," Lorenzo said. "Practically every day, one or two students ask me if there is an opening in the program. Even on the last day of the program, I had two kids come up to me asking if they could get in!"

"When I see our students' faces, their diligence and how they look at one another when they do something great on the computer or they reach the next level, it speaks volumes about C8Kids. They're smiling. They're happy. They're proud of themselves."

"They have such positive energy," said Lorenzo. "They're laughing. They're playing. They're following directions. They're helping one another. Our kids enjoy this and they look forward to it every day. They are showing me that they are dedicated to this and that they are getting something from it. They're taking it home. They're taking it into school. They're taking it to their desk. And they're taking it to their work. I see it in their faces. And as we continue to gather data with our district assessments, we are going to see more improvement in this group of kids that are involved in C8. I know it. I feel it."

Shortly after the program concluded, Lorenzo was selected by the CT Parent-Teacher Association as Principal of the Year for 2012.