

Aetna Foundation Regional Grants Program Impact Report

When printed this report should not exceed 4 pages.

Organization:

Project Name:

Program Area (Obesity, Racial and Ethnic Health Care Equity, Integrated Health Care):

Awarded Amount:

Duration of Project (months and dates):

Background Information: *Please state the goals and objectives of your project.*

Seeds in the Middle partners with parents, educators, students to inspire and empower their communities by taking control of their health and greening their environment. Seeds in the Middle provides the tools needed for fighting obesity and to engage in a healthy lifestyle. We integrate healthy lifestyles, nutrition, gardening, physical fitness and other wellness components into learning everyday in a comprehensive, educational package for schools. We educate how to grow, how to market, how to cook, how to exercise, all elements necessary for life-changing lifelong health choices. Seeds in the Middle seeks to demonstrate that living a healthy lifestyle in terms of diet, exercise and activities can be easy, accessible and affordable, joyful, fun and "hip."

Crown Heights, Brooklyn has one of the highest rates of childhood obesity in New York City. Seeds in the Middle seeks to devise holistic solutions that recognize obesity is caused by many factors; and establish a sustainable infrastructure that provides multiple channels for supporting healthy choices including: education, access to better quality food, and opportunities to engage in healthy activities.

The Hip2B Healthy project's goal is to establish gardens within schools as an education platform and improve access to healthy foods; create markets where children are empowered to make healthier choices; start up sports leagues; and integrate environmental education into everyday curriculum.

The objectives are:

- increased access to healthy foods
- increased access to physical fitness
- to create an environment that changes student behavior and attitudes so they seek healthy choices, thus driving down incidence of obesity and diabetes.
- change the mindset so that we create among students and their families a market for healthy options
- train teachers to integrate environmental education and healthy options into the school day, creating sustainability
- engage students in hands-on learning involving nutrition and environmental education that could ultimately boost student performance

•**Project Plan:** *Please describe how the activities, expected outcomes and associated impact, and metrics of the project were achieved as outlined in your project plan. Include quantifiable (e.g., numbers reached) as well as qualitative.*

•**ACADEMIC ACHIEVEMENT: This is a major achievement.** While all students at PS 221 took part in programs, only one focus 4th grade class engaged in ALL activities. This engagement contributed to impressive test scores, far surpassing peers in the same educational district, District 17: **69 percent** scored at or above grade level in **literacy** (compared to **43%** districtwide) and **85 percent** scored at or above grade level in **math** compared to only **49.5 percent** districtwide. **96%** scored at or above grade level in science compared to **77 percent** districtwide, all according to state records for 2012. **Besides students saying they feel and eat better, we attribute the teacher's integration of health and environmental lessons - plus math practice in the Hip2B Healthy Market - to this high academic performance. These scores match Manhattan School District 2, among the city's highest scoring with a majority middle-class Caucasian student population.**

•**NUMBERS REACHED:** More than **650** students - at PS 221 from fall 2011 through Dec. 31, 2012 - were impacted by programs, either planting, cooking, composting, going to the Hip2B Healthy Market or fitness. **60** parents took part in exercise classes. In surveys, teachers reported children bringing in healthier snacks and changing their attitudes toward healthy food and fitness.

GROWING FOOD: At least **12 6th graders** who graduated from our program and attend the New Heights Middle School nearby are planting their first edible garden with faculty at their site, an indication of sustainability.

•**OUTDOOR:** **Seven planting beds were constructed outside**, in which children grew tomatoes, green peppers, herbs, flowers and vegetables. Over the summers of 2011 and 2012, teachers, parents and students tended the gardens, so they could harvest in the fall. **Thirty fourth graders** turned the planting beds into a worm composting bin by adding organic scraps from lunch - like apple cores, banana peels, lettuce and other natural refuse. **All fourth graders - 90 students - plus 180** second and third graders - now plant and compost in lessons integrated into common core curriculum in the classroom (a key goal of our sustainability project).

INDOOR: An empty classroom became a "Green Room," with more than **20** indoor planting boxes on legs, built by Home Depot. Farmer Rodrick Brown - a founding farmer of our Crown Heights Farmers Market - worked with teachers and **100 second and fourth graders** to plant tomatoes, peppers, herbs and vegetables in indoor planting boxes. In April and May of 2012, **60 third graders** - with teachers began planting in the Green Room. They held the school's first plant sale for Mother's Day as a healthy fundraiser - making \$85. In the 2012-13 school year, **more than 270 students from grades kindergarten through 4th grade** are planting. Ten graduate students and expert volunteers worked with students and teachers to connect gardening, growing and composting, healthy eating to core curriculum.

•**COOKING:** At least four classes, involving more than 100 students, 2nd and 4th grade, cooked with chefs or expert visitors. They integrated the growing boxes into math lessons and a second grade class completed a recipe book in June 2011.

CHEF NIGHTS: During **6 Chef Nights**, more than a dozen professional chefs or culinary students taught **40 fourth and fifth graders** how to prepare healthy meals in the school kitchen, then held cooking demos for families. Students set and cleared the tables. After everyone ate, families went home with recipes and ingredients. Families reported back that they did cook the recipes at home. **50 parents, and 200 children** were engaged in these signature "Chef Nights" in which chefs with students had to prepare, nutritious, delicious meals for the same cost as fast food combos to challenge assumptions that junk food is less costly and time consuming than fresh cooking at home.

ACCESS to FRESH FOOD: The Crown Heights Farmers Market opened in September 2011, the first time residents in the neighborhood could buy fresh produce easily and affordably near home. This was not part of our original proposal, but had been a goal of Seeds in the Middle, given the lack of access to fresh produce in the neighborhood. The market was attended by more than 1,000 clients and ran for the second season from June 7-Nov. 15, selling more than **\$5,500 in produce through EBT transactions** alone, and more than **\$350** in Health Bucks and other incentive programs that provide low-income residents with free dollars to buy fresh. The market also became an outdoor classroom for PS 221. **Six classes, 200 students**, visited the market with teachers and learned about farming and a wide array of produce. The market became a source of fresh food for Chef Nights - thereby raising awareness in the community of its existence.

• **Hip2B Healthy Market:** engaged **70 fourth and fifth graders**, who sell healthy items at the market. The market is accessible to the entire school, with about 50 or more students and parents attending any given week and **more than \$1,000 in sales**. In spring 2012, a second teacher, Ms. Simpson, also volunteered for the market. Curriculum tying market to core standards in grades 3-5. **25** students wrote persuasive letters to vendors to solicit donations to the market; and **15 fourth graders** wrote letters to Michelle Obama to urge her to visit.

FITNESS: More than 120 boys and girls from age 4 to 11 took part in weekly soccer clinics and games, held fall, winter and spring. In Jan 2012-June 2012, an 3 day a week early morning walk/run program engaged volunteer medical students, teachers with 42 students registered. We held 20 classes of Zumba for families, in 2011 and 2012, involving 10-20 parents plus a dozen children. Last but not least, the youth soccer program inspired the creation Soccer for Harmony, involving more than **200 adults and youth** in three tournaments on Dec. 11, 2011, March 25, 2012 and in partnership with the New York Police Department's Family Day - on June 2, 2012.

PROFESSIONAL DEVELOPMENT : Monthly meetings with 6 key teachers were held with up to **33** teachers attending at various times. More than **30 teachers** were involved in professional development with New York University or classroom partners. to integrate healthy eating, nutrition, gardening, composting, fitness, cooking into the curriculum. Teachers from every grade at PS 221 took part.

•**EVALUATION:** An evaluation conducted by the New York Academy of Medicine found "positive self-perceived changes in knowledge and behavior (by students). The majority of students surveyed (63%) reported that compared to this time last year they eat more fruits and vegetables. 48% said that they drink more water and 46% said they exercise more now than a year ago," the draft report said. "... staff did report that parents have asked for recipes, plants, and foods introduced at school and that children have asked their parents to prepare food and/or meals from various Hip2B Healthy activities. Teachers also noticed changes, however small, in their knowledge and behavior. Some mentioned exposure to a new fruit or vegetable, changing what they offer during classroom parties to more healthy options, or learning from a trip to Whole Foods."

Analysis and Interpretation— *In this section, please reflect not only on the results of your project but also on the work itself— what is the significance of what you are doing and what impact will it have on the community and the field?*

Seeds in the Middle is profoundly grateful to the Aetna Foundation for being the first to substantially fund a daring experiment - can a school with the demographics hit worst by the obesity epidemic transform their unhealthy environment if given the resources and support to do so? Our objective was to change the mindset of students and faculty to actually seek healthy choices because they have learned to link them to higher academic achievement, self-esteem, quality life and overall feeling of well-being. Can students with limited knowledge beforehand directly tie food and fitness to obesity and diabetes and other diseases plaguing their elders? The answer is, "Yes."

Our project found that a multi-faceted, joyful interventions have engaged students and faculty to sustain programs with minimal support. The 2012-13 school year had a devastating start with Hurricane Sandy, but teachers now are conducting their own gardening and worm composting lessons, tying them to math, science, social studies and literacy standards. They have added the early morning walk/run and Hip2B Healthy Market and healthy cooking initiatives.

Communities besieged by obesity-related diseases tend to be low-income, and suffer from lack of affordable fresh food and fitness. Teachers, under pressure to reach high test scores for underperforming students, traditionally are reluctant to be adventurous in hands-on curriculum like Seeds in the Middle. Seeds in the Middle successfully showed teachers they can be in a win-win situation - meeting core curriculum goals while promoting student health and engagement. They can now be ambassadors to other schools with the same challenges and demographics. In one prime example, standardized test scores for one focus group - 26 fourth graders engaged in all activities - were substantially higher than the district average. Almost 70 percent of our group scored at or above grade level in literacy, compared to 43 percent districtwide. Math was more astounding: 85 percent of students scored at or above grade level in math - including 27 percent above grade level - compared to less than 50 percent scoring at grade level districtwide. Science: 96 percent of students scored at or above grade level. These scores compete with New York City's top school districts.

Seeds in the Middle started with one principal and two teachers committed. Now, the whole school community is engaged, with more than 20 teachers actively integrating Seeds in the Middle core pillars - gardening, cooking, fitness, environmental education and the market - into the classroom day. By popular demand, the program expanded to a morning walk/run, adult zumba, cooking in the classroom, and ever-growing gardening, recycling and composting and then to the Crown Heights Farmers Market and community soccer tournaments.

Seeds in the Middle has transformed an educational community in which the words "health" or "obesity" were rarely if ever mentioned into a unique model, giving youth a sense of power to change their own environment and health and build vocabulary, experience and their limited world. Teachers can become ambassadors of change in schools with similar obstacles. We believe the model as a whole can be successfully replicated in other like schools - with appropriate funding and support. We also believe parts of the program - like the Hip2B Healthy Market - can be replicated easily and incorporated into core curriculum of other schools and complement other interventions. For example, if a school already has a garden, the market could further strengthen student real world health connections.

Ms. Sara Ann Fearon, the 4th grade teacher whose class standardized test scores were strikingly higher than the school district average, has taught at PS 221 for 22 years. She says the children have no outside activities like ballet or community centers, "no outlets" other than school, suffer from an array of maladies plaguing low-income families - psychological issues, even dental and medical problems easily cured if they could afford care.

"I'd like to see this program take off and more and more integrated into the school. Parents came and actually told me that children are doing comparison shopping when they go to the food store and can easily calculate things. 'Don't buy this because you can get eight in this one, instead of that,'" she quoted the students as telling parents.

"Seeds in the Middle brings us sort of a real life situations and it encourages them to use it in their learning. It brings real world experience to them. It helped them learn because they were able to make connections between things. It facilitated their independence. They were part of the planning. The fact that Brooklyn Channel 12 came... was a biggie for them. It means that whatever they were doing was important enough to be broadcast... that they are being taken seriously...

"When children are taken seriously, they are part of a whole world. They are not just little people being ignored. It is very empowering and freeing to them. They took their part in the world seriously."

Human Interest Story – *Based on your analysis and interpretation response, please provide a human interest story illustrating the success of the project.*

Just as I was compiling this report, PS 221, the pilot PS 221, was undergoing a “quality review” by NYC Department of Education officials. Seeds in the Middle has been advocating to the teachers - who are under extreme pressure - to shine by integrating their innovative work with children around integrating health, knowledge about the impact of food and fitness on obesity and diabetes, gardening - showing where food comes from so the children are connected with gardening and composting.

The teachers have been hesitant, fearful to be innovative in a school confronting low test scores and students facing multiple social-emotional issues, just one facet of our challenge in the obesity epidemic. However, third-grade teacher, Ms. Williams, approached me excitedly after reviewers meticulously watched her teach.

“I taught the math lesson with a “modification,”” she exclaimed, beaming. explaining how she incorporated their required measurement units into determining height of plants, dimensions of plant boxes, and spacing of seeds and seedlings. “You know what? She came right up to me afterward and asked to see a sample of the lesson plan WITH the modification so she can share it!”

The PTA president, who suffers from obesity, and has two overweight children, explained how her son now veers here away from the sugary cereal selections. “No, Mommy. We’re not buying ‘Cocoa Puffs,’” she laughed. “That sugar is no good for you.” Instead, he steered her toward the Cheerios.

“The students are thinking about healthy food,” said Principal Clara Kirkland. One child excitedly confessed that she had especially brought her dollar to buy a healthy snack at the student-run Hip2B Healthy Market. No junk food, she said.

Last spring, at least 10 classrooms became Hip2B Healthy Classrooms, establishing “rules” which characterized their goals. For example, no junk food. (See photos)

Following the controversy of Mayor Michael Bloomberg’s call for banning sodas over 16 ounces in public places, the students conducted a “No Sugary Drink Week.” They wore stickers: “No Sugary Drinks for Me. Ask me why!”

Several fifth graders explained how the walk/run, held a half hour before school three days a week, made them feel.

“It makes me feel awesome.... feel awake... feel smart,” said one fifth grade boy. Added a classmate: “It wakes up our brains.”

Please see photo array to see photos of students and their comments after a field trip for cooking at the Yale Club:

<https://picasaweb.google.com/113639743061367189796/YaleClub?feat=email>

Barriers & Obstacles – *What barriers and/or obstacles were encountered and how were they overcome? What are the most important “lessons learned” from the event/project; and, if applicable, what changes are being considered to ensure future projects and or programs run more efficiently.*

Our greatest obstacles are staffing, community outreach and funding to bring in the expert support needed to fully implement Seeds in the Middle initiatives in a thorough way. Lack of funds mean depending on volunteers and interns who cannot be as available and skilled as we would like to carry out all our objectives. Principal Kirkland lost 10 teachers, increasing class size. Scheduling with teachers is always difficult and time-consuming to set up. As for professional development, we decided to instead work with grade leaders and have them relay back to fellow teachers.

Communications to the community and in schools need multiple channels: calling, sending flyers, emails, making announcements to send out messages. Parents have not engaged as we hoped, so we created more joyful ways to draw them in with chef nights, and put more focus on children to bring home the message. Residents are not online or easily reachable. We paid community residents to call, flyer and outreach into the community centers.

A major obstacle has been the lack of an on-site coordinator to integrate the pieces together; and support teachers so that the program can operate full-swing. Each component is a program in itself, and needs a person in the community to take ownership. We continue to work hard with teachers to integrate all elements into their curriculum. Teachers need more guidance on fitting initiatives into everyday learning, but there is progress. Our objective is to integrate lessons into curriculum so teachers can sustain programs, which is beginning to happen as of January 2013. A new core curriculum introduced in spring 2012 made lesson planning difficult for the next academic year, so we brought in more volunteers to support and worked directly with educational leaders.

Lessons learned: A project of this magnitude needs at least two full years of support and significant start-up funds to give time for elements to take root. Ideally, a fully funded staff and more support for teachers in classroom will speed up that process. Innovative community outreach strategies are essential to success in underserved neighborhoods, where families and communities are so fractured. Teachers need tremendous support in the classroom because obesity is tied to multiple factors: poverty, low-achievement, lack of quality food and fitness, broken families. We are dependent on volunteers, and while dedicated, they cannot be relied upon to build a program. We had expected to measure BMI's at the beginning of the grant, but due to Department of Education restrictions, we could not take them. Our evaluation was therefore based on interviews and surveys and focus groups and test scores. We will seek more ways to evaluate.

One Succinct Results Paragraph for Public Use – *In one paragraph, please describe key results and impact on the audience/population served and the issue being addressed through the funded initiative. Please make sure this paragraph is ready for potential public use including media as it may be disseminated by the Foundation.*

Seeds in the Middle, named by fourth graders, proves that challenged communities at the heart of the obesity epidemic can be empowered to change their unhealthy environment, and boost academic achievement, if provided adequate support and resources. This multi-faceted, grassroots strategy transformed a school in low-income central Brooklyn, where over 95% of students receive free or reduced lunch, from being ignorant of links between food and fitness to good health to becoming active advocates for positive change. Students and teachers at pilot PS 221 - with 570 students - are sustaining initiatives - growing food, marketing healthy food, nutritious cooking, fitness activities, with minimal support after two years and can now share their successes with others. Test scores for our focus class of 26 fourth graders far surpassed the district average and compete with some of New York City's best schools. This Aetna Foundation grant additionally supported a new Crown Heights Farmers Market and Soccer for Harmony tournaments that provide fresh food and fitness sustainably to an underserved community. There is more to do, but we transformed gray into green, destitution into inspiration. We have a model to replicate successfully and joyfully in similar schools elsewhere.

Financial Results – *Complete the included Excel worksheet, which shows your original budget, with expenditures to date. In this section, describe significant deviations in expected costs and budget plans and how those deviations affected the grant progression.*

We were fortunate to receive other small grants during the duration of the Aetna Foundation grant, which helped supplement funding. Our financial report shows we spent the amounts allocated to the Aetna grant, and used additional monies to offset consultant, communications and printing costs.

Communications/Media – In this section describe the communication/media pieces associated with this project including the audience targeted and reach achieved.

During 2011 and 2012, Seeds in the Middle pilot projects in PS 221 were extensively covered by Channel 13, a local Brooklyn news station. But we also received media coverage in major outlets, like the New York Times and WNYC for the **Crown Heights Farmers Market**, opened in September through November 2011. The market could not have been made possible without the Aetna Foundation. Below are links to both the coverage and photo arrays.

We reached an estimated 5,000 people through printed flyers and newsletters for all programs. Some are attached. In addition, we made banners to publicize the program, displayed at the soccer field and at PS 221. They displayed the Aetna Foundation logo. We sent out regular Constant Contact newsletters and photo arrays. Some are below. We can forward the online newsletters to Aetna, at your request. Our email list is nearly 5,700, currently.

PRESS COVERAGE: Soccer for Harmony tournaments, the first Dec. 18, 2011, which brought together the Jewish and minority communities, both adult and youth, for social change through sports. Below also are links to news stories and photo arrays of the events.

Charity Sub featured Seeds in the Middle as one of its first charities. This is the Youtube released in January 2012:

http://www.youtube.com/watch?v=i_c7b4w_tnk

In April 2012, this video was submitted for a competition about promoting fitness in schools for a federal government competition.

<http://www.youtube.com/watch?v=uOovWStLCNM>

Crown Heights Farmers Market

NY Times: <http://www.nytimes.com/2012/08/17/nyregion/struggling-crown-heights-brooklyn-farmers-market-loses-farmer.html>

WNYC: <http://www.wnyc.org/articles/wnyc-news/2012/aug/16/its-not-easy-being-greenmarket/>

WCBS RADIO:

<http://soundcloud.com/alexsilverman/crown-heights-market>

DNAINFO.com:

<http://www.dnainfo.com/new-york/20120719/crown-heights/crown-heights-farmers-market-struggles-survive-as-others-bloom>

NY1: <http://www.ny1.com/content/147710/community-calls-new-crown-heights-market-a-success>

BROWNSTONER:

<http://www.brownstoner.com/blog/2012/06/crown-heights-farmers-market-opens-today>

COLLIVE.COM

http://www.collive.com/show_news.rtx?id=20338&alias=today-farmers-market-opens

Crown Heights Youth Soccer

<http://thebrooklynink.com/2011/11/30/37817-soccer-inspires-kids-in-crown-heights/>

Soccer for Harmony

New York Daily News

<http://www.nydailynews.com/new-york/brooklyn/orthodox-jewish-caribbean-players-crown-heights-set-soccer-rematch-article-1.1049242>

WCBS RADIO: <http://soundcloud.com/alexsilverman/sets/crown-heights-soccer/>

Crown Heights Info:

<http://www.crownheights.info/index.php?itemid=42597&catid=48&pending=1#pending>

CHEF'S NIGHT - Daily News

http://articles.nydailynews.com/2011-03-06/entertainment/28686489_1_french-culinary-institute-chefs-cook-healthy-food-crown-heights

PreventiveObesity.Net: The founding of Seeds in the Middle:

<http://www.preventobesity.net/inside-track/edition/2011/10/20>

Seeds Photo Arrays: Include Chef Nights, Curriculum, Fitness, Gardens, Professional Development and more. More photos available on request.

HOME DEPOT BUILDS A GARDEN: https://picasaweb.google.com/113639743061367189796/PS221BuildsAGardenThanksHomeDepot?authkey=Gv1sRgCMv87b_p3sH1qAE&feat=email

[PS221BuildsAGardenThanksHomeDepot?authkey=Gv1sRgCMv87b_p3sH1qAE&feat=email](https://picasaweb.google.com/113639743061367189796/PS221BuildsAGardenThanksHomeDepot?authkey=Gv1sRgCMv87b_p3sH1qAE&feat=email)

CHEFS IN THE CLASSROOM - FRUIT!

<https://picasaweb.google.com/113639743061367189796/ChefsComeToClassWithFruitItSHip2BHealthy?feat=email>

YALE CLUB COOKING CLASS: <https://picasaweb.google.com/113639743061367189796/YaleClub?feat=email>

CROWN HEIGHTS FARMERS MARKET

<https://picasaweb.google.com/113639743061367189796/CrownHeightsFarmersMarketLastDay?feat=email>

TEACHERS: PROFESSIONAL DEVELOPMENT DAY 2011

<https://picasaweb.google.com/113639743061367189796/TeachersSmellTheLavenderNowThatSAPDDay?feat=email>

FDNY CHEF NIGHT: <https://picasaweb.google.com/113639743061367189796/FDNYChefSNight?feat=email>

WORMS, WORMS, WORMS IN CLASSROOM! <https://picasaweb.google.com/103545295315740390380/Worms?feat=email>