Farm to School

Druid Hills Middle School
by
Jen Sauer
6th grade Earth Science

2012
Impact

1. Number of children impacted/served by grant: 150

   • Number of other stakeholders impacted/served by grant:
     Teachers: 4
     Parents: 150 (parents of children)
     Cafeteria staff: 0
Impact

- I have been implementing organic gardening activities for a year before DHMS received the Farm to School grant. Since we have received both financial and knowledge-based support, I have been able to get more teachers on board to do garden based lessons as well as incorporate more gardening into my own teaching. Since I was able to buy supplies for students to do gardening, measuring, and planting in the garden, I was able to get more students involved in farm to school.

- I teach an Environmental Studies class where each week students were involved in maintaining, planting, and harvesting the garden. My core classes of Earth Science also did a measuring lesson and pollinator garden project. My weekly Environmental Club also helped with maintaining the garden. I plan to continue this next year, but be more organized and creative in my lessons.

- Overall the process has been received highly from both students and administration which means that we will be able to do more gardening with students for the 2012-2013 school year. We also received another garden grant from Whole Foods for $2,000 dollars. Both the grants and positive feedback from the parents and students has inspired our principal to gather a team of teachers to use the garden as a way to inspire our title-1 learners in math and LA for next year. This is still in the planning process.
Environmental Studies Class and Club

- Creating signs and taste testing Service Berries from our Native Garden. I didn’t know we had the berries until the F2S workshop! Students helped to spread the word about the importance of native gardens by going room to room and allowing teachers and students to taste a berry.

- Creating a garden gro-light so students can plant early and taste the fruits by May.

- We added seedlings to beds as well as planted seeds directly in the ground. We had better success with direct seeding as our seedlings needed better care during transplanting.
Environmental Studies Class Continued

- Harvesting and cooking! We partnered with the Special Education teachers and cooked a Kale spaghetti dish and Spinach cream cheese croissants. Students also gave samples to administrators and teachers to spread the word about the garden. Students remarked how delicious the Kale was in the noodle dish, which many were surprised how tasty it was.
Environmental Club and Environmental Studies Field trip

- 30 students and adults attended a field trip to Gaia Farms for a tour and taste of delicious chard. I made a list of questions for students to answer that were based on material covered in 6th grade science: soil fertility, compost, and soil and water conservation. This trip gave us the opportunity to see a real farm within city limits. These students would not have had this opportunity if it had not been for this trip.
Environmental Club and Environmental Studies Field trip

- Smelling fertile compost and tasting chard students picked from the garden...students and parents remarked how tasty chard is! These experiences have caused students to try vegetables they would not have tried before.
Club members created a cold frame so that we could get beans and cucumbers by May. The black signs are located in the native and organic gardens. Students use china markers to change them seasonally.
Environmental Studies Class

- End-of-year Harvest salad and homemade butter with basil on bread.
- Most students asked for seconds of the tasty salad and homemade dressing.
Creating butter learned from the F2S workshop. I taught students the scientific method as we compared the mass of butter from one that was made from room temperature cream and the other one that was refrigerated. We also put in basil from the garden. Students tasted the butter on bread and loved it! One student remarked how he tried this the next day with his mother.

I made a “Measurement in the Garden” worksheet where students practiced finding area, volume and perimeter in real life applications in the garden. We discussed that it is important to use math when gardening so you can think ahead and have enough food for your family. It was amazing how students did not know how to use measuring tape! This was a math lesson that really engaged students!
Earth Science Classes Continued

- Where are all the Monarch Butterflies Project: Students must find a potential place to build a pollinator garden bed based on data they gather in their group: shadow percentage of garden area and compass direction of flag shadow, length of flag shadow throughout the day, soil temperature, and air temperature. Students will look at results from each group and class periods. Students must also decide what data is the most useful in determining an ideal garden spot as well as what data is likely to change as the Earth’s rotation and revolution proceeds. Based on overall results, students wrote essays on what space is ideal for a pollinator garden. Groups with the most convincing argument built the garden bed in May. Students also saw the mutual relationship with pollinators and flowers to create fruits.
Pollinator Garden Continued

- The project motivated students even until the end of the school year when students are ready for summer break. It was really interesting to see how many students did not know how to use a shovel or how to plant. We developed a great partnership with the special education teacher, Ms. Tidmore, who was extremely knowledgeable about Pollinator gardens.
Lessons learned and Challenges

• Overall I learned that students really enjoy the process of planting, harvesting, and eating local foods as well as learning in the garden. They are willing to eat what they grow even without salad dressing! After students had gone out into the garden and we had tasted some food and discussed food issues, I gave students a questionnaire about food. I found that while students were enthusiastic about gardening, there were still misconceptions about where our food comes from. Overall students correctly questions about soil conservation and the importance of soil pH. Below are some of there responses:

1. When asked how important is it to grow your own food, (16 students had choices between 1 for the greatest and 5 for the least):

• 1-16 students, 2-10 students, 3-10 students, 4-5 students and, 5-5 students.

2. When asked if they knew where their food is grown, 2 had no response, 20 said no, and 23 said yes. Of those that said yes, 14 could only say a “farm” or “market”. Of those that listed a place, 6 out of 9 thought the food comes mostly from Georgia.

3. Most recognized that when food is grown in Georgia, this saves on energy, gasoline, money, air pollution, and resources.
Lessons learned and Challenges

- During the Farm field trip, students answered questions on a worksheet I created. Most students answered correctly with a 90% average. When asked about what they thought about Joe’s local organic farm and his philosophy of farming, this is what some of them said:

- “It’s awesome!”
- “I think it is funny that he does it just because he likes food”
- “Farming locally is better because it saves energy and transportation. I think that it’s a good thing because it’s a so much better way of living.”
- “It’s better.”
- “I thought it was fun and it was very interesting.”
- “I agree that I can grow my own farm because I like to eat too!”

- In terms of challenges for the year, I would say that finding a way to organize 25-30 students in the garden is a challenge and that stopped me from going to the garden weekly as a class. Instead I had a group of 3-5 students go out and water/harvest at a time. Also, I had to buy class sets of supplies to do lessons in the garden which I used the grant money for but also takes planning time. Also there was never enough food for all 120 students to eat, so I have to find other ways for the students to be involved. Overall though I am so happy to have been a part of the farm to school movement in Georgia and with 4 new beds added on, more teachers and students can be involved for the next school year! As my students grew the garden this year, other teachers and students were definitely inspired to try this next year. The real challenge will be if we can balance the big changes coming next year in standards, teacher pay, and teacher/student evaluations.