

The Bayscape Garden

Pamela Pennington-Schau (pschau@ccboe.com)
7th Grade Life Science, John Hanson Middle School, Charles County

John Hanson Middle School completed the bayscape garden as a student service-learning project in Mrs. Schau's 7th grade science class. The Chesapeake Bay Trust funded more than \$3,000 for the purchase of plants and supplies for the garden. The purpose of the project was to correct an erosion problem on the banks of a wetland that previous 7th grade students had constructed, and provide a better habitat for wildlife. Bayscaping is a gardening method considered to be environmentally friendly due to the use of native plants. Native plants need little or no watering, fertilizing, and pesticides, yet provide food and shelter for diverse a population. Best practices:

Best Practice 1: What recognized community need was met by your project? Our school community had a problem with erosion along the banks of a wetland, which was planned and constructed by our 7th grade student in 2000. Also, when the school was built years ago, several acres were completely cleared for the building, parking lots and athletic fields. The students took action by creating a home for a diverse population that considered components of their habitats. Therefore, the bayscape prevents erosion and provides a habitat for many animals.

Best Practice 2: How was the project connected to the school curriculum and curricular objectives? The bayscape project provided an opportunity for students to learn by synthesizing and applying the knowledge gained in the classroom to a real life, meaningful situation. This project was designed to cover, enhance, and reinforce state Life Science Standards and Skill and Processes Standards. For example, the students took population counts of the wetland and compared data from previous years. They calculated the percentage gains between the three years of data. Then they considered the factors that affected the size and stability of the population in the wetland. The students applied the knowledge gained to make decisions about creating a bayscape garden. In another instance, they collected population data from the planned bayscape area to be used as a baseline for future collections. The data was compared to the baseline data collected in the wetland area previous to its construction. The students analyzed the factors that might have contributed to the wetland baseline being much lower than the bayscape baseline.

Best Practice 3: How did participants reflect on their experiences throughout the project? The students had the opportunity to reflect throughout the project by gathering information or data and making decisions based on their reflection. For example, they gathered data on growing conditions of the planned site to chose appropriate plants and analyzed the soil for nutrients to choose the proper fertilizer. They also had a portfolio that contained all of their accumulated work on the bayscape. JHMS's Language Arts teachers guided the students through a formal written reflection on the project using the students' work.

Best Practice 4: How did students take leadership roles and take responsibility for the success of the project? The students and professionals problem solved together to make well-informed decisions. For example, Charles County Master Gardeners provided a guest speaker to

provide information on the bayscaping gardening concept and the guidelines to design a bayscape. The students used that information to design their school's bayscape. Actually, they were very excited and motivated about creating something that would be a positive asset to the school community and last a very long time.

Best Practice 5: What community partners were worked with on this project? The bayscape garden project enabled professionals from the Southern Maryland area, parents, staff members, administration, and students to work together with a common goal. Pam Pennington-Schau and Jill Locco, science teachers, wrote a grant to the Chesapeake Bay Trust for supplies and plants. The Charles County Master Gardeners provided special speakers and "mentors." Several Master Gardeners and parents of the students volunteered to guide students when they planted the plants. We received discounts from Heaven's Gardens and Lowe's, technical assistance from Charles County's Environmental Specialist, Steve Cardano, and a truckload of river rock from Chaney Enterprises.

Best Practice 6: How did you prepare and plan ahead for the project? The Bayscape Project was planned in the late summer between the Master Gardeners and Mrs. Schau. The funding was provided by a grant from the Chesapeake Bay Trust and written previous to the project in the fall. A timeline was created collaboratively between the Master Gardeners and the teaching staff.

Best Practice 7: What knowledge and skills did students develop through this project? The knowledge and skills the students developed were diverse. First they learned about the bayscaping concept and it's components. They were able to apply the knowledge gained in their classroom about ecosystems, habitats, and interdependence in an environment to their planning of the garden. They completed a site analysis and soil analysis which was another example of the application of their findings to the decision making process required. The students learned to work with adult professionals, ask questions, and take action. They strengthened character traits such as respect, responsibility and perseverance. But most of all, they learned that they can make a difference!

