



**2009 Annual Convening of
Service-Learning Leaders
Maryland State Department of Education**

Service-Learning

Goes to the Reef Unit

Primary Subject: Science

Grade Level: 6th

Additional Subject Area Connections: Language Arts, Mathematics

Unit Title: Service Learning Goes to the Reef

Type(s) of Service:

Indirect Service Opportunity

Unit Description: Students created reef balls at Environmental Concern's Wetland Learning Campus. With the help of Environmental Concern's youth educators, twenty-five sixth graders produced three artificial reef balls for use as habitat in a Chesapeake Bay reef sanctuary. The primary goal of the project was to give students an opportunity to take part in a process that will result in preserving and enhancing the area's greatest natural resource, the Chesapeake Bay.

Creating reef balls is a two-step process. The first is to assemble the molds and to participate in a "pour". Pours consist of assembling the molds, placing bladders and nerf balls around the inside (these create the vacant space) then mixing and pouring the concrete. The students worked in teams, some students assembled the molds, others prepared the concrete mixture while others waited to add sand and inflate the bladders. The second step is "Hatching", which is simply pulling the mold off and peeling out the deflated bladders. The final touch was power washing the outside of the ball to roughen the surface, this will help benthic organisms attach. Environmental Concern has arranged for the three reef balls to come to their final resting place on a designated reef sanctuary in the Bay.

Maryland State Curriculum Indicators Met

Content Title:

Science: 6.B1

- ∞ Recognize and explain that human caused changes have consequences for Maryland's environment as well as for other places and future times

Mathematics: 3.C1, 3.B1

- ∞ Estimate and Apply Measurement Formulas
- ∞ Measure in Customary and metric units

Language Arts: 4.A2

- ∞ Compose oral, written, and visual presentations that express personal ideas inform and persuade

Potential Service-Learning Action Experiences:

Hands-on (teach others by doing), communication skills, environmental awareness, concern for the bay, and team building

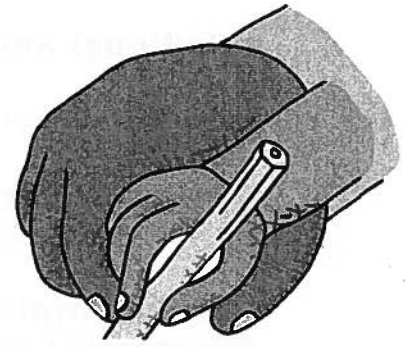
Local School System: Talbot County Public Schools

Service-Learning unit teacher: Christopher Renaud, crenaud@tcps.k12.md.us

LSS Coordinator: Susan Angel, sangel@tcps.k12.md.us

Alignment with Maryland's Best Practices of Service-Learning: *Service Learning Goes to the Reef*

- 1. Meet a recognized community need**
Restoring habitat, environmental awareness and education
- 2. Achieve curricular objectives through service-learning**
Although science was prevalent throughout this project, math, language arts, and communication/team building skills were also utilized.
- 3. Reflect throughout the service-learning experience**
Students reflected by educating the public and local businesses in our community about the plight of our fragile habitat and what action can be taken to help slow the negative trend that has so drastically decimated species that once thrived in the bay.
- 4. Develop student responsibility (Students have opportunities to make decisions about the service-learning project.)**
Students decided what was the most fruitful avenue to present their findings to the community through objectives that correlate with the state curriculum.
- 5. Establish community partnerships**
Students teamed with Environmental Concern in St. Michaels, Maryland to spearhead the reef mold project. (Environmental Concern Inc. is a 501(c)3 public not for profit Corporation, that is dedicated to working with all aspects of wetland)
- 6. Plan ahead for service-learning**
Students may do follow up visit with Environmental Concern to complete water samples and measure ph levels, and prepare future reef projects/molds.
- 7. Equip students with knowledge and skills needed for service**
Students have used their team building skills to accomplish a goal, and this is a part of the success. The students put their ideas into action through a coordinated, well-crafted effort.





2009 Annual Convening
of Service-Learning Leaders
Maryland State Department of Education
Service-Learning Unit
Kids Helping Kids

Primary Subject: Language Arts

Grade Level: 6th, 7th, 8th

Unit Title: Kids Helping Kids

Type(s) of Service: Indirect

Unit Description:

Students read articles on the problems of hunger and homelessness and complete writing activities which support Frederick County Public School's (FCPS) curriculum using the information they have learned. Students also participate in a read-a-thon where they are "paid" in canned food by sponsors for reading a certain number of minutes per night. A food drive involving the entire school follows the preparatory reading and writing activities. The entire school is involved and friendly competition helps us in our quest to gather food items for our local food bank. Next, guest speakers from the Coalition for the Homeless in Washington, D.C. visit our school and present to students on the topic of homelessness. Two men, who have been homeless in the past, speak to the students about their personal experiences. Then, we watch United Streaming video clips on frostbite in a continued discussion of the hardships of homelessness and again, use the information in activities which support FCPS curriculum. Lastly, we collect socks and mail them to the Coalition to be distributed to the people who are homeless on the streets of our nation's capital. Students reflect on these experiences several times throughout the project.

Potential Service-Learning Action

Experiences:

- Food Drive for Local Food Bank
- Sock Drive for homeless in DC

Local School System: Frederick County

LSS Coordinator: Elizabeth Duffy

LSS Contact Information:

7630 Hayward Road, Frederick, MD 21701

Thurmont Middle School Contacts:

Melanie Ware (melanie.ware@fcps.org) and Candace Desonier (candace.desonier@fcps.org) **Phone:** 240-236-5100

**Maryland State Curriculum
Indicators Met**

Content Title: Reading/Language Arts

Literary:

1. Apply comprehension skills by reading and analyzing a variety of self-selected and assigned literary texts including print and non-print.
2. Analyze important ideas and messages in literary texts.

Informational:

1. Apply comprehension skills by selecting, reading, and interpreting a variety of print and non-print informational texts, including electronic media.
2. Analyze important ideas and messages in informational texts.

Writing:

1. Compose texts using the prewriting and drafting strategies of effective writers and speakers.
2. Compose oral, written, and visual presentations that express personal ideas, inform, and persuade.

Reading:

1. Use strategies to make meaning from text (during reading).
2. Use strategies to demonstrate understanding of the text (after reading).

Alignment with Maryland's Best Practices of Service-Learning: *Kids Helping Kids*

1. Meet a recognized community need

Our reading specialist originally brought the need for food for our local food bank to our attention. The guest speakers from the Coalition for the Homeless called our attention to the need for socks for the people who are homeless.

Our local community which is a poor, rural community is helped by the canned food brought to the food bank. The homeless in Washington, D.C. are helped by the sock drive. The students are also impacted for they are shown that even at 12 years old, they can make a difference in the world and bring about change.

2. Achieve curricular objectives through service-learning

The information from articles and the United Streaming video clips were used to meet the following Language Arts indicators from FCPS Curriculum:

- compare and contrast with prior knowledge as well as each other
- draw inferences from the information and act upon it
- explain the usefulness of information
- write letters (to thank the guest speakers from the Coalition for the Homeless)
- Language Usage indicators were met in students' letter writing

3. Reflect throughout the service-learning experience

Students reflect through discussion and two class questionnaires are presented after each experience. Reflection encourages students to think about their involvement in this project, its impact, and the way taking part in it might affect them in the future.

4. Develop student responsibility (Students have opportunities to make decisions about the service-learning project.)

Students demonstrate leadership by finding sponsors for the read-a-thon, managing their time to allow for maximum minutes of reading each night, and by requesting to have a sock drive after hearing the guest speakers from the Coalition for the Homeless discuss the need for warm socks during the winter months.

5. Establish community partnerships

The local food bank and the Coalition for the Homeless were the community partners involved in this project.

6. Plan ahead for service-learning

Planning takes place between team members in developing the lessons, as well as with our Reading and Enrichment specialists. The classes' ideas initially led to the planning of the sock drive. Students are involved in planning for the following: creating copies of the articles and pledge sheets, finding the United Streaming video clips, creating reflection sheets, contacting the guest speakers and arranging for them to present, sending out emails to coordinate schedules so that all students could attend, counting canned food, delivering it to the food bank, boxing the socks and mailing them to Washington D.C., and mailing thank you letters.

7. Equip students with knowledge and skills needed for service

The students become more aware of the problem of hunger and homelessness in our area, learn to compare and contrast information, make inferences, write better letters, and most importantly, realize that they can make a difference in our world. They learn empathy and compassion and generosity which are as important as any curricular indicator for it helps them become good human beings.

