Community Gardens  
Primary Content Area: Biology

Introduction  
Community beautification is a vital aspect of community development. Many urban students live in residential settings that do not have the luxury of backyard space. Neighborhood parks provide space for recreation activities and add value to the community when properly maintained. This project encourages proper maintenance of community property and neighborhood parks.

In order to sustain the presence and quality of human life, humans and communities must understand their dependence on earth resources and environments, realize how they influence earth systems, appreciate earth’s carrying capacity, manage and conserve non-renewable resources and environments, develop alternate sources of energy and materials needed for human sustenance, and invent new technologies.

Project Goals  
o Students will learn about environmental cycles and ecosystems, the process of photosynthesis, and other biological components important to plant life.
o Students will understand how to select and plant ornamental or food plants for different types of soils, climates, and growing conditions.
o Students will contribute to the sustainability of our neighborhood parks through environment enhancement projects.
o Students will learn to landscape garden space through removal of non-native species, planting native species, creating decorative planters (pots/window boxes/etc), and maintaining the garden.
o Students will reflect on their experiences.

Procedure/Project Sequence
1. Identify possible location within school or immediate vicinity for a garden and make a brief sketch of your vision. Brainstorm curricular and implementation strategies with a few teachers.
2. Discuss proposal with Principal (time, money, parent permission) and Service-Learning Coach.
3. Backwards mapping is required in this project. Take a good look at your school’s calendar and decide on two days after May 15th (Mother’s Day) for planting. You will also need at least two days in middle to late April or early May for bed preparation.
4. Once you know the dates, you need to decide with whom you are going to work. If this is your first project, you may want to work with at least one other teacher. You also need to select the students who will be working with you. It is advisable to select a class of students and not some from each class. This is very useful for planning purposes. (If your project is going to be an after-school project, you can easily choose any student interested in working with you.)
5. Introduce the project plan to your class and try to see if there any students with prior landscaping/gardening experience. Once you identify them, try to use their strengths and experiences. They will love the fact that you are depending on them and often emerge as leaders. (Nov-Dec)
6. Take your students to the computer lab and show them images of some garden (landscaping) designs. Any internet search will provide these. (Nov-Dec)
7. Provide your students with a simple map of the planting area. Ask them to come up with possible garden designs. It is important that they understand that the plan should be simple. (Nov-Dec)
8. Display the best designs and select the one that seems the most practical. You may have to decide this on your own and edit it to some extent. (Jan)
9. Discuss garden design with Principal for approval as well as with your school's Engineer. This is very important. (January). Make sure you have budget you can work with. You can get some funding support from your Service-Learning Coach.
10. Work with your students to determine what plants you want in the garden. It is always better to start with (native) perennials because you will not need to buy plants every year. However, since they are slightly more expensive than annuals, it will be a decision you will need to make. (March-April)
11. Visit local nurseries and see if they will deliver the plants to your school free or for a small price.
12. Work on your garden map and physically enter names of plants on the plots. Ask students to look up scientific names of these plants.
13. Buy or borrow garden tools that you will need. Make sure you remember to use the tax-exempt letter for your purchases and save your receipt for reimbursement.
14. On the pre-assigned dates for April-May go out with your students and work to prepare the beds. On the pre-assigned dates for May-June go out and plant with your students.
15. Spend a period discussing the implementation of the garden and make sure students create a reflective piece.

If you need students to work outside of your class periods, make sure you discuss this with the Principal, and make permission slips for the students.

Community Partners/Resources
Center for Green Technology - [http://www.chicagogreentech.org/](http://www.chicagogreentech.org/)
Openlands Green Teacher Network – [www.openlands.org/green-teacher-network](http://www.openlands.org/green-teacher-network)
Kid's Gardening - [www.kidsgardening.org](http://www.kidsgardening.org)

Addendum
This project addresses the following Common Core State Standards:
CCSS.ELA-LITERACY.RST.11-12.2
Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
CCSS.ELA-LITERACY.RST.11-12.4
Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
CCSS.ELA-LITERACY.RST.11-12.9
Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

This project addresses the following Next Generation Science Standards:
HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.

**Duration**
Students should spend 7-13 on this project.

**Preparation:** Background information/Designing survey/Calculating carbon footprint – 3-5 hours  
**Action:** Gathering Global Warming Challenge commitments – 2-4 hours  
**Reflection:** Writing/Discussion/Extended research/Presentation – 2-4 hours

**Cross-Curricular Connections**
Connections with Technology, Art, Geometry, and History courses could be made during this project.