

## **Where is the Best Place to Plant a Garden on a School Campus?** by Audra Linville McDonald

**OVERVIEW:** Students will analyze the physical and human characteristics of their school campus to identify a practical location for a school garden. They will present and defend their findings to various audiences.

**Geographic Question:** Where is the best location for a school garden? How will students take physical and human geography into account when deciding its location?

**Connections with Curriculum:** Meets the following Oregon Benchmarks:

Social Sciences CCG. *Understand how peoples' lives are affected by the physical environment.* Benchmark 1.

Social Sciences CCG. *Understand how physical environments are affected by human activities (understand how and why people alter their physical environment).* Benchmark 2.

### **National Geography Standards Addressed:**

#14- How human actions modify the physical environment.

#3- How to analyze the spatial organization of people, places, and environments on Earth's surface.

**Grade Levels: Planned** for 3<sup>rd</sup> through 5<sup>th</sup>, although it can work at other grade levels with adaptations and modifications.

**Objectives:** While working independently and in groups, students will:

- create a map of vegetation, clear-space, and buildings on the campus;
- analyze the map to identify where an appropriate location for the garden;
- communicate with staff and administrators to attain permission to alter the land on school property;
- cooperate with fellow classmates in order to reach a consensus on garden placement and contents;
- evaluate the current and future needs of the garden and;
- present the class project to the campus and local community.

**Materials:** Pre-made campus map (students can create their own if time/skill-level permits or the campus fire evacuation map might serve as a good template). Markers, pencils, poster paper, rulers, newspaper, partially rotted leaves (might be attainable on the school campus itself), compost or planting mix and seeds or plant starts chosen by teacher or students depending on time constraints/availability.

Helpful, but not necessary materials: Aerial photo of school campus (for discussion purpose), a clipboard for each student, a scale drawing of campus, graph paper, and volunteer community garden coordinators (as speaker/guides for the class).

## **Procedures:**

### **Introduction:**

- a. Introduce this project by explaining that humans alter their environments all the time in order to exist/adapt/survive on Earth's surface.
- b. Ask the students to give examples of how humans alter Earth's surface.
- c. Discuss if these actions are necessary or unnecessary in order for humans to survive.
- d. Lead a class discussion on the school's campus. Why is it designed the way it is? As students attempt to explain the campus, note how it is difficult for all students to have the same picture of campus layout in their mind. Locations are hard to describe orally! Introduce the need for maps.
- e. Introduce a uniform campus map that the class will be using. Have a poster size map at the front of the room and an individual copy for each student to use. Discuss its features: compass rose, key, aerial view, etc.

### **Activity:**

- a. Take a walking tour of the campus and have students identify on the map where they are. This allows students to actively understand maps. If possible, leave numbered markers around the campus ahead of time so students can label each location on their map with a number. For example: If I see a #6 flag taped to the school's front doors, I label my map with a #6 where the entrance of the school is depicted on my map.
- b. After students are familiar with the concept of mapping and how buildings, landmarks, roads, and landscaping can be mapped, divide the students into groups and have them brainstorm possible locations for a campus garden.
- c. Groups (or individuals) will share their findings and discuss *why* they decided to locate the garden where they did (i.e. water supply, sun/shade mix, accessibility, safety, and practicality, and student traffic).
- d. Teacher-led discussion should follow addressing what plants/gardens need in order to thrive. Discussion length depends on students' prior knowledge about gardening.
- e. Class will decide on the "ideal" location for the garden as a whole. Teacher and students will decide on the dimensions of the garden. It should be small for the first time gardener.

### **Extensions:**

- 1) Have students record and plot the height of their plantings over several months.
- 2) Have the students create a *scale* representation of the garden and its contents.
- 3) Prepare a presentation of the garden to the school community. Dedicate it to someone special to the community.
- 4) Allow students to write an article for the local newspaper announcing their class project or have students write a letter to the editor thanking local volunteers or donators.

- 5) Have students research the plants placed in the garden. Will they survive?
- 6) Discuss how they can create a more *sustainable* garden? Would growing food be more beneficial to the public at large? Would wildlife friendly plantings be better? What will blend in with the rest of the school campus?
- 7) Invite guest speakers to talk about urban gardening.
- 8) Students can brainstorm the possible careers that pertain to this kind of activity. For example: Landscaping Design, forestry, etc.
- 9) Create a “chore” list of who has to take care of the garden during free times (recess).
- 10) Create labels (and laminate them to be placed in the garden) based on research for each plant in the garden (include all of the info. that is provided on plant starts or seed packs).

**Assessment:** Have students do a self-assessment of contribution to the class garden. Did they work well with others? Did they try their hardest etc.? Map activity can also be graded. Students may also be asked to write “a report” about where their favorite location for the garden was and be asked to defend their reasoning for choosing such a location.