

Gecko Garden: Rethinking Curriculum Integration

Today's students are hungry for work that is real, for learning that is meaningful.¹ Many teachers use projects to connect learning in a variety of subject areas and most children are excited to make these leaps of understanding. This strategy allows students to take more responsibility for their learning as they make decisions and create solutions to problems that interest them. In fact, with a little imagination, all subjects can be integrated as students apply their academic, social and life skills to their work in a garden.¹ By adopting a project-based learning strategy, garden work will not compete with our standards; rather it will be an avenue to high standards.²

Moreover, in this age of global warming, population explosion, and declining natural resources, it is more important than ever that our children learn to be better stewards of our environment. Working in a garden helps children develop an appreciation for our environment and the precious resources it provides.

The reasons in the literature are numerous for supporting garden use and incorporating project based learning, the unique situation facing Grant with the expansion to K-8 offers several more. The joining of garden projects with a Farmers market can offer appropriate challenges to all students. It can give older students, with years of practical experience, a venue and meaningful way to foster younger students. And like no other event at Grant, it can unite all members of the school behind a showcase educational project that teachers, parents and especially students will be proud of. That said, some practical steps are required to reap the many benefits of this garden project:

1. Build upon Grant's tradition of learning in the Gecko Garden and create a school-wide garden project that could culminate in a student run Farmers Market.
2. Give students full responsibility for the garden and the market. The students should decide: what to plant and when, how to amend the soil, how to procure supplies, and how to price and market the garden produce and so on. These are all decisions we are teaching them to make with the skills they are learning in math, science, social studies and reading.
3. Utilize garden volunteers to develop and/or assist teachers in creating lesson plans to support each activity in the garden and market.
4. Foster participation from all the students and teachers at Grant through grade-appropriate activities including garden maintenance, planting and sales;

The Grant garden project offers many benefits. Read on, and learn how you can help make it grow.

1) Rethinking Curriculum Integration, www.ecoliteracy.org (An education think-tank)

2) Childs Garden of Standards. Linking School Gardens to California Education Standards, California Department of Education, 2002. Delaine Easton, Superintendent of Public Instruction

The project would involve each grade level having two main responsibilities: 1) one aspect of garden support or maintenance 2) growing one crop for the market or managing sales. The project is designed to be flexible allowing classes to participate at varying levels.

Example:

	Fall	Winter	Spring
	Prepare	Plant	Harvest
Grade			
K	orientation	beans	
1	clean beds	bulbs	
2	clean beds	carrots	
3	clean beds	potatoes	
4	maintain compost	peas	
5	maintain worms	sunflowers	
6	soil/pH testing		Market Sales
7			Market Analysis
8			

In the fall semester general responsibilities in the garden will be divided among different grades. Some of these jobs can be short (soil testing - one or two visits to the garden), some will be ongoing throughout the year (i.e. compost management). In setting this plan into motion teachers should provide feedback as to which job is most appropriate for their grade level. Once this decision is made grade appropriate lesson plans can be developed by teachers and/or volunteers to support that activity. These plans will be maintained from year to year so that new staff and volunteers can adopt it immediately.

In the winter crops would be selected and divided among the grades. Initially teachers and volunteers can assist the students in making this decision though ultimately the students can make it. Through February and March each grade will plant one crop, each class within that grade will have one bed they are responsible for.

In the spring when crops are ready for harvest the Farmers Market would take place either during morning drop off or afternoon pick-up approximately once a week with sales to family and staff. Market sales would be run by upper grade students. For example if 6th graders were in charge of sales and collected financial data they could analyze this data in the 7th grade and use it to plan for next years crops. Proceeds from the market would go back into the garden budget for supplies the following year. The learning experience is the goal - not necessarily profit.

This is an ideal environment for students to learn, make mistakes, predict and learn even more!

If a class chooses to spend additional time utilizing the garden in between the periods of Prep., Plant and Harvest many additional lessons can be developed at a teacher's discretion such as

- 1) Studying the botany of the plant
- 2) Schedule planting dates based on the predicted growth rate.
- 3) Calculate the quantity of seeds needed based on plant density and bed size.
- 4) Measuring and charting plant growth
- 5) Science Fair projects based on varying conditions for optimal growth (ie water, fertilizer, density, etc)
- 6) Instead of just selling a crop classes could choose to donate to local shelters or provide flowers to nursing homes.