Grant Application

Applicant Names: Wilbur Purdue, Susan Armstrong, Chad Felgar, Catherine Berg, Megan Austin

Email: wpurdue@coupeville.k12.wa.us

Position or relationship to Coupeville School District: Teachers at Coupeville Middle and High Schools

Amount requested from Community Foundation for Coupeville Public Schools: $1,483.90
Detailed Budget: These quotes are for garden beds consisting of wood frames, hardware, soil, and compost.

- $110.48 per bed in materials and $32.30 in planting medium. The total for each garden bed would be $142.78.
    - $142.78 x 5 beds = $713.90.
- Cost per garden project varies due to the focus of the project.
    - Purdue Sustainability Bed budget: $70.00 for pvc pipe, hardware and cloche materials for seasonal gardening, seeds, and germinating materials. This bed would be part of the school educational/production beds being installed over time.
    - Felgar HS FFA/Sustainable Ag Bed budget: $150 for seed potato and floral seed costs. Processing equipment including buckets, hand tools, clippers and other processing equipment included.
    - Berg Dye Garden budget: $200 for perennial and annual dye plants. Some of the perennial plants have a greater price than the annuals from seed.
    - Armstrong Veggie Smoothie Bed: $200 for seeds, harvesting equipment, washing equipment, germinating materials, seasonal gardening materials, and sanitary materials for food usage.
    - Austin History Garden Bed and accompanying Historical Items: $150 for lumber and hardware for constructing ancient tools as well as seeds for economy crops.
- Total Project Cost: $1,483.90
- Other funds available to apply to project: $300.00 from Chartwell's grant received by CF2S (Coupeville Farm to School).
- Total Requested: $1,183.90

Connections between project and student learning goals:

(please note that lists of standards being achieved by classes were not included, but instead general descriptions of the uses and activities were provided to show classroom goals).

Five teachers would like to secure funding to build the needed garden infrastructure within the Middle and High School garden site in collaboration with the Coupeville Farm to School program to create educational garden sites. Each of the garden sites would consist of a raised bed that would facilitate educational opportunities ranging from agriculture, sustainability, engineering, history, business, life skills, chemistry, medicine, arts, and soft career skills for each of the classes.

Each of the beds would require hardware for the construction of the bed retaining structure and soil/compost for filling the beds with. Some beds would require specific materials that others would not to reach their goals.

Teacher Comments:

Mr. Purdue:

looks to have a garden bed in which students can raise crops as in years past for several purposes. The students would learn about the processes for germinating, transplanting, caring for, developing alternative growing environments and harvesting produce in our unique marine climate. Students would also learn about dietary benefits of the produce they are growing and participate in menu planning and cooking with their produce. The bed would give a hands on location for students to learn and apply knowledge gained in their sustainability class.

Ms. Berg:

Natural Dye Garden Plots

Science classes that concentrate on chemistry topics would like to use growing plots to develop a natural dye garden. The goal is to grow dye and fiber plants to allow students hands-on experience on a small scale. Plants will be used to analyze the properties of both the fibers and dye plants involved in this process. The ultimate goal is to develop integrated curriculum with the Art department for a joint project.

Phase I - Develop plots for future growing.

Phase 2 - Grow a variety of plants from seed and rooted starter plants and/or bring community expert into the classroom to conduct a natural dye workshop with students.

This dye garden would be a joint project between Ms. Berg and members of the Whidbey Weavers Guild who have expertise in natural dyes. This garden plot can also include edible dyes, fiber dyes, and medicinal dyes.

Ms. Austin has included the following description of her project:

While studying Ancient Civilizations in 6th Grade History our students learn about how the ancient Egyptians relied on the Nile River for their very survival. I would like to propose two small additions to the school gardens that would further reinforce this learning - a shadoof and papyrus.

One way the Egyptians relied on the Nile River was by using the waters of the Nile for irrigation. A primary example of a tool they used as part of irrigation systems was a shadoof, a bucket attached to a long pole, to lift water from the Nile to the basins they used to trap the floodwaters for later use. I would like to propose that we construct a replica of an ancient Egyptian shadoof so the students can experience how this ancient technology works first hand. This is critical as many students struggle with understanding how this technology works when the only frame of reference they have is a 2D picture or a media clip.

Another way the ancient Egyptians used the Nile was by harvesting papyrus, a reed plant that grew along the river, to make baskets, sandals, rafts, and rope. Egyptian peasants also had to boil tough papyrus plants to supplement their diet. Additionally, it is used for papermaking by cutting strips from the stalks of the plant. The ancient Egyptians soaked these strips in water, pounded them flat, dried them, and then joined them together to make paper. I would like to grow our own papyrus so students can see both what the original plant looks like as well as use the plant to make paper. Last year the 6th graders attempted to make their own papyrus paper by importing dried papyrus from Egypt. It was a fun, informative, hands-on history experience. However, it is an experience that would be greatly enhanced by being able to show the entire process from "stalk to finish."

Ancient grains were a form of currency in the fertile crescent. Barley, Emmer, Wheat, Spelt and other grains were used as currency and certain classes were only able to eat certain grains. The lower classes ate Barley, while other classes had a more varied diet. Students would benefit from raising grains in a garden bed, harvesting them as part of their class, and using those grains to study ancient cultures.

Mr. Felgar:

A garden bed would provide for two learning opportunities needed for both Sustainable Agriculture classes and FFA use. Both entities work together on projects and can both utilize the materials. The funds would go towards: crops that can show the impact of growing requirements upon crop yields (conventional practices vs organic) on such crops as potatoes and grains, floral production as a business and FFA CTSO activity, and to other agricultural practices that are required for raising crops. The funds being asked for would be applied to

gardening equipment and seed expenses (seed potatoes cost considerably more due to their mass).

Ms. Armstrong:

In a cooperative partnership with the farm to school program, my Transition class would like to work towards the goal of opening a small smoothie bar to serve students before school. The Transition students would acquire several employable skills from this endeavor such as; horticultural and nursery skills, food prep and food service skills, Cashier and money handling skills, Customer Service skills and a host of soft skills. We would like to use this endeavor to work, with the Farm to School Program, towards a small business that sources from as many of our own grown foods as possible. With this partnership and the funding of this grant, this small business smoothie bar will be possible.

The overarching goal of our Transition Program is to build employable and independent living skills. This small smoothie bar promotes achievement of these goals.

When students have gained skills they can use to apply for jobs, our main goal with this project with have been achieved.

Number of individuals benefitting from this project:

Students: 200 - 300 students per year if not more

Staff: 5

Community: 4-5, will also involve the CF2S program which has a significant volunteer base.

Effectiveness of Project:

Effectiveness of this project will be seen as students, community, educators, and those involved in each of these specific projects now enter a hands on learning environment. Their actions have direct impact on the variables under their control. They learn the struggles and challenges of agricultural production. They are immersed in the world of what they are learning and they are applying skills learned in the classroom to the systems provided to them in the school garden. At the elementary school student learning is already increasing dramatically as students grades k-5 have been given the opportunity to learn core concepts in a garden format. Science, math, language arts, visual arts, physical education, history, business, and all other areas of learning occur in these environments where skills are taught that are practical and applicable outside of the classroom. Teachers can track the amount of time students now have applying what

they learn in the classroom outside in the garden. At last count, Coupeville Elementary School had increased science instruction time from 20 minutes per week to 90 minutes per week. We are looking to do the same, but within our specific content areas.

Timeline:

The timeline for this project would begin immediately upon receipt of the funding. Garden bed construction would begin with securing of materials and construction would begin with Mr. Felgar's class working on practical construction of the beds. Using hardware and items secured in this grant the shop classes would be able to produce the beds within a month's time at the longest. The soil and compost would be ordered from a local company that usually delivers within a week's time. The layout for the beds is happening under Zvi's guidance, as the CF2S garden coordinator. Seeds and other growing/harvesting materials would be ordered and arriving about the same time the beds would be completed.

Planting can begin in the beds and lessons continue.

Beds would be integrated into the CF2S management cycle so that as materials are worn or break down, they would be replaced by CF2S's replacement cycle. The beds and materials would be managed by CF2S and kept in working order and appearance. If a teacher stopped using the bed for any reason, the bed would be rotated back into CF2S uses which are centered on education, production, and health of our student body.

Communication/Media coverage:

Each of the garden bed's progress will be communicated to "the foundation" by the teacher involved. This can include invitations to come view progress, pictures, and descriptions of the progress of the project.

The garden progress will also be communicated through CF2S's website and Facebook page. With hundreds of followers within the community the impact of this grant will be communicated quickly. CF2S also is asked to write sections for the schools' newsletters.

www.coupevillefarm2school.org

The Applicant understands that any awarded funds are to be used as stated in the application and cannot be transferred to other projects or uses. If funds are not totally used, the balance is expected to return to the Foundation. If a project is funded by requests to multiple agencies and ends up with excess funds, a refund to the Foundation is expected.

Wilton R. Lundie (Susan Armstrong)

(CHAD FELGAR)

Mary Catherine Berg

Applicant(s) signature

1/25/17

Principal's signature

Jim Shank

Superintendent signature