

Project TED (Teaching Ecological Diversity)

Arlee Schools
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Arlee ECOS Team:

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Abstract:

Introduction:

Our demonstration project is the development of a native plant garden and outdoor classroom as a memorial for Ted Hesse, a 27-year veteran first grade teacher who passed away in 2006. The development of a garden was proposed as a memorial by a group of Mr. Hesse's colleagues before Arlee became an ECOS school and there was a strong desire on the part of the ECOS teachers to make this our demonstration project. We believe this project has been an excellent outlet for the ECOS demonstration project for several reasons. First, it has been an opportunity for ECOS to develop an outdoor classroom that provides a practical facility for ecological and Native American culture education. Second, the project has enjoyed momentum within the school and community. Finally, because of the momentum of the project and the enthusiasm of the people close to Mr. Hesse, implementation of the project has been very successful thus far.

We proposed that Project TED would conform to a theme to teach ecological diversity. In order to match that theme, we determined the garden would consist of native plant life that was culturally important to the Salish and Kootenai peoples. We also determined that Project TED should serve as a functional outdoor classroom where

teachers could conduct science education and other curricula in an aesthetically pleasing environment. To create that functional classroom, our proposal called for installation of four all-purpose tables that students can sit, stand, or run experiments on. We designed the garden with plantings to attract local birds and insects so the classroom will provide constant natural stimulation.

The proposed interpretive infrastructure of Project TED will be focused towards promoting ecological and cultural literacy. All plant species in the garden will have an associated informational placard. We also proposed the placement of cement casts of common animal tracks along the primary path of the garden with associated placards. All placards will include the common name, the Latin name, and the traditional Salish name of the organism. All of the placards will be mounted on student-decorated wooden neckties in memory of Mr. Hesse, who was known for his use of a large tie collection to vary his daily attire. We originally proposed to build four small signs for each of the four cardinal directions visible from the edges of the garden. On each of these signs will be an artist's rendition of the mountain view behind the sign with short descriptions of geologic, ecological, and cultural history of the mountains in the view.

Schoolyard Demonstration Project Description

Project TED has enjoyed much success. We have removed sod, installed tables, installed weed block, defined gardens and trails, placed natural mulch material, and made over 30 native plantings, the vast majority of which appear to be healthy this spring. Installation of Project TED was a combined effort of ECOS fellows and teachers, as well as other Arlee teachers and spouses of teachers who are interested in Ted Hesse's memorial (see table 1 for list of contributors). Purchases made thus far to implement

Project TED include materials for worktables, weed block, garden edging, plants, materials for a memorial sign, and paint for the neckties (table 2). Everything purchased to date has been placed permanently in the garden except the memorial sign, which should be built in early summer.

Project TED can and has been used as a functional outdoor classroom and it conforms well to our theme to Teach Ecological Diversity. Our project was designed to be centrally located on the Arlee Schools campus, which includes the Elementary School, Junior High School, High School, and the district administration offices. Thus far, Project TED has been used by the ECOS (first and fifth grade) classes as an outdoor classroom where ECOS curriculum pieces have been implemented. Arlee ECOS teachers held a dedication ceremony in memorial of Ted Hesse this spring. During that ceremony, we broadly educated teachers from all over Arlee Schools on the uses and purpose of the outdoor classroom. Arlee ECOS teachers are determined to continue using the garden and have assured us they will promote wider use of the garden.

While it is completed with respect to ECOS responsibilities, there is still work to be done to complete Project TED. The cement casts and placards have not yet been completed. Arlee ECOS teachers chose to focus purchasing efforts on materials for the garden's sign, and the animal track casts were not completed, nor are they likely to be completed. In addition, we have been struggling to get a Salish language font that is usable by the engraving company that is manufacturing the placards, so these too are not yet completed. The cardinal direction signs were indefinitely postponed. They will not likely be an ECOS-specific project. Instead, ECOS teachers are seeking volunteers with the skills and expertise necessary to design those signs to take over that project. There is

also an Eagle Boy Scout candidate interested in helping Bonnie Barger with Project TED for his Eagle Scout project. We have not yet specifically determined what his role will be in Project TED. We are also planning to mount some of these ties on the legs for the worktables. Project TED should continue to grow and develop because there is a great deal of community ownership in the project. As ECOS Fellows, we have full confidence that Bonnie Barger and Ronda Howlett will coordinate completion of the projects that remain.

Sustainability

The Arlee ECOS Team identified four factors crucial for guaranteeing sustainability of Project TED: 1) development of student, teacher, and community ownership, 2) understanding on the part of groundskeepers of the purpose and intent of the garden, 3) promotion of Project Ted as a useful outdoor classroom by ECOS Teachers, and 4) leadership on behalf of ECOS Teachers to insure the purpose and intent of Project TED are maintained.

To foster student, teacher, and community ownership of Project TED, we have taken a number of approaches. During the development of the garden and outdoor classroom, we enlisted the help of several teachers, spouses of teachers, and community members who had a close relationship with Ted Hesse. Because Project TED is a memorial garden, there are a number of individuals, most notably Bonnie Barger and Ronda Howlett, who have a deep personal interest in ensuring the garden is well maintained with plants that are native to the Jocko Valley and are culturally significant to the Salish and Kootenai Tribes. We are primarily relying on Bonnie Barger and Ronda

Howlett to ensure the garden is cared for and is widely used by teachers and students from each of the Arlee schools on the campus. These teachers use the outdoor classroom on a regular basis with their classes and encourage their students to pick up garbage, replace bark mulch where it has blown away, and otherwise take care of Project TED. While these are only two classrooms of students, it is a good beginning to student ownership in the garden. Students often requested to go to the garden for lessons, even on days with foul weather. We also noticed students commonly respecting the garden paths, picking up garbage, and replacing kicked stones or bark mulch. The students assisted with placing bitterroot plants, which is one of the most culturally significant plants for the Salish tribe, into the demonstration project. Particularly at these plantings, the students seemed to demonstrate strong feelings of protectiveness and responsibility for the garden. These are good signs that as more teachers start utilizing Project TED and encouraging good stewardship, student ownership of the garden will improve.

In an effort to promote community ownership and encourage use of Project TED as a community resource, the ECOS Teachers held a garden dedication and memorial service for Ted Hesse. The ceremony was open to members of the school and broader community and included a Native American drum ceremony, student poetry readings, and other celebrations of Mr. Hesse's life and Project TED.

If Arlee is once again chosen as an ECOS school, we strongly recommend the development and modification of curriculum pieces that specifically designed to be implemented in Project TED and at the Jocko River Restoration Demonstration Project Site located adjacent to the Arlee Schools campus. These two resources, used separately, or in concert, have enormous potential for ecological inquiry, phenology, natural history,

and for integration of science with other subject areas, such as literature and Salish cultural studies. Because the garden is already developed, future ECOS cohorts should assist teachers and groundskeepers with maintenance of Project TED. If the cardinal direction signs are not yet completed should Arlee become an ECOS school again, these would make an excellent stand-alone demonstration project.

Summary of Accomplishments with Project TED

- Project TED has been used as a functional outdoor classroom and it conforms well to our theme to Teach Ecological Diversity.
- Thus far, Project TED has been used by the ECOS (first and fifth grade) classes as an outdoor classroom where ECOS curriculum pieces have been implemented.
- Most of the native plants made it through the winter and appear to be establishing themselves well.
- We are nearing completion of the order for the species name placards, and the wooden ties they will be mounted on have been cut out and decorated by the students. The memorial sign materials have been ordered and the sign will be assembled by Bonnie Barger and her husband this summer.
- The dedication ceremony was a huge success in terms of creating awareness of the impact of the ECOS program on the students and teachers, and the purpose of Project TED. We have enjoyed much support for this project from the teachers, students, and staff of the Arlee school district.