



### **1.Opportunity Statement**

Coyote Springs Elementary School and the Highlands Center for Natural History, a non-profit environmental education organization, have entered into a unique educational partnership. A half-time Highlands Center education staff person will spend time over the next two years on the school site to work with teachers to develop a K-5 cross-curricular Habitat Learning Program, and provide instruction for teachers and students.

For the purpose of this grant, our goal is to develop a science curriculum with assessments that align with Arizona state standards along with cross-curricular ties to math, technology, and writing standards. The scope and sequence of the curriculum, instructional lessons, and aligned assessments will be created by Highlands Center personnel and teachers at each grade level K-5. The curriculum will be utilized for classroom instruction and correlate with lessons used in the schoolyard wildlife habitat to provide students with an outdoor hands-on learning environment. The 2002 study by the National Science Foundation concluded that science learning has to be more hand-on and teachers need more training and support in the sciences. The Highlands Center for Natural History will be

providing the personnel to develop curriculum and assessments and model instructional lessons for teachers by teaching K-5 students. The SRP grant dollars will be used to pay six teachers, one at each grade level, to develop curriculum during the summer and the '05-'06 school year. In addition, a portion of the grant dollars will go to the Highlands Center for Natural History to be used to pay their personnel for curriculum and assessment development.

## **2. Project Description/Timeline/Measurement Methodology**

The project has two main components: 1.) A team of educators will develop curriculum and create specific instructional lessons with pre and post assessments to help evaluate student progress. 2.) Personnel from the Highlands Center for Natural History will model the lessons for teachers to learn from for future instruction in the habitat.

Our primary goal is to increase students' performance in the area of science, math technology, and writing by utilizing the schoolyard habitat.

The timeline for our curriculum and assessment project is as follows:

- July 2005- develop lessons and assessments using performance objectives from state standards for the first quarter of instruction.
- September 2005- develop lessons and assessments using performance objectives from state standards for second quarter.
- October 2005- develop lessons and assessments using performance objectives from state standards for third quarter.
- January 2006- develop lessons and assessments using performance objectives from state standards for fourth quarter.

Student achievement will be measured by a pre-assessment given at the beginning of each quarter and a post-assessment given at the end of each quarter to evaluate the progress of student performance.

### **3. Student Impact**

The potential number of students positively impacted by this program will be approximately 750 from Kindergarten through 5<sup>th</sup> grade. (We are the largest elementary school in Yavapai County.)

#### **4. Creativity**

Our project is unique in that no other school in Yavapai County has a curriculum and assessment project that is a true partnership with a professional environmental education organization. By utilizing the expertise of educators at Coyote Springs Elementary and experts of science and environmental education at the Highlands Center for Natural History, we will create a sustainable, model schoolyard habitat in order to provide meaningful and relevant learning opportunities for all students. The habitat garden is being created to model the varied habitats found in the Central Arizona Highlands, as well as to provide opportunities for hands-on studies growing plants and observing wildlife. Students will engage in cross-curricular activities such as mathematical problem-solving as it relates to plant growth and life cycles, keeping data and records about garden wildlife observations, recording weather and water use over time, and creative writing assignments that will include the use of journaling outdoors. There are many other concepts across the curriculum that will also be the focus of these lessons. For example, students will study the effects of technological advances on our environment and learn about common practices for conservation.

## **5. Promotion Opportunities**

Recognition of SRP funding will be provided in the following manner:

- Assembly at Coyote Springs to honor SRP
- Press release in the local newspaper – Prescott Courier
- Sign in the Habitat will list SRP as funding source.
- Article in the Highlands Center newsletter which has a distribution to 500 community members.

## **6. Sustainability**

The schoolyard wildlife habitat will remain an outdoor learning environment for the life of the school. The teachers' and students' knowledge base will continue to increase as we work with the Highlands Center personnel during the next two years. In addition, curriculum will be reviewed on a yearly basis to ensure alignment with Arizona state standards. Sustainability will also come from financial contributions from family, staff and community members in the form of tax credit donations each year. The Coyote Springs Elementary School Parent/Teacher Organization will also continue financial support of this project as well and has pledged to assist with habitat needs that may arise. This project will continue to benefit the students of Coyote Springs Elementary School, other schools in the state interested in creating our model schoolyard wildlife habitat and the community as well.

## **7. Evaluation Process**

The success of the project will be based on evaluating the performance of the students from pre and post-assessments during each quarter and from science AIMS test scores in the near future (pilot AIMS science test for 4<sup>th</sup> graders scheduled for 2006.) Our student performance goal is to have 80% of the students at an 80% mastery level on the quarterly post test assessment. Furthermore, we will conduct surveys with students and teachers in an effort to receive feedback concerning the habitat and instructional program.

## **8. Community and Parent Involvement**

The Coyote Springs Elementary Parent/Teacher Organization initially created the idea of a schoolyard wildlife habitat after a teacher requested the P.T.O. to purchase a few trees for the area behind the school. Our PTO raised \$9000.00 to support the habitat construction and materials. In addition, we have formed a habitat committee comprising of students, teachers, parents and community members to oversee the development and creation of the habitat as well as curriculum. These groups are jointly involved with developing this project and the curriculum based on state standards.

Funding for the unique partnership with the Highlands Center has been received through generous tax credit donations from our community. Funds received cover costs for the school year, but additional funding is necessary for initial curriculum development by teachers and Highlands Center staff time during July.

## **9. Budget**

The grant dollars will be used as follows:

Coyote Springs will utilize \$3000.00 by paying six teachers \$500.00 each for developing the habitat curriculum during the '05-'06 school year. Each teacher at each grade level will spend one week in July working directly with Highlands Center personnel and a Prescott College Professor of Curriculum to develop a yearly grade level scope and sequence in addition to curriculum work throughout the year.

Highlands Center for Natural History will utilize \$2000.00 to pay for Highlands Center personnel to assist the individual teachers for approximately 80 hours in July with the development of yearly grade level scope and sequence and the further development of habitat curriculum.

Additional funding is being requested through the Arizona Game and Fish Heritage Grant in the amount of \$10,000.00 for the completion of the habitat's construction and personnel costs. Notification of approval for the Heritage Grant will be in May, 2005. In addition, we have secured funding through our tax credit program for the '04-'05 school year to assist in personnel costs for a ½ time Highlands Center staff member to instruct students during the '05-'06 school year.