

2014-2015 Educational Grant Application

Submission Date	2014-03-27 06:36:57
Name of Grant	Creating Depth and Longevity in our Ecological and Environmental Learning
Primary Contact	Kirk Evans
Applicant E-mail	kirk_evans@allenisd.org
Phone Number	(972) 971-2004
Campus	Olson Elementary School
Curriculum Area	Science
Grade Level(s)	K-5
Students Impacted	700
Approver Name	Andrew Benesh
Approver E-mail	andrew_benesh@allenisd.org
Project Purpose	<p>For the past five years the Foundation for Allen Schools has funded the Ecoliteracy Project @ Olson Elementary. One goal of our project is to build on place-based educational opportunities by getting children outside studying, observing, and experiencing local natural areas and wild places. These experiences have helped our Olson community build a deeper understanding of our blackland prairie ecology, create the first knowledge base of our ecological address and develop a more profound sense of place. Another goal is for students and teachers to gain in-depth knowledge in local ecosystems and use current techniques in field based scientific investigations continuously in their classrooms. Because of these experiences and several trainings more than forty 5th and 6th students have become a core group known as "Teaching Buddies". These students share their love for learning in the outdoors and knowledge of science with 25 classrooms at Olson Elementary. The Teaching Buddies are able to apply their learning opportunities in the planning and implementing of lessons in their "buddy" classrooms. The funds from this proposal will help us continue our teaching buddy program, train more students and teachers in new science concepts and techniques, help our students continue to build their ecological literacy, build a more passionate and profound understanding and love of science and help us to continue our studies in natural areas around Allen.</p>
Project Description	<p>Our twenty-five Olson teachers, who are our target population, will continue taking their students on Field Investigations throughout the school year (3 times in the Fall and 3 times in the Spring). Teaching Buddies (approximately forty 5th and 6th grader students) will continue to provide</p>

classroom and outdoor lessons for their buddy classrooms. The Teaching Buddies will meet twice during each month to plan lessons and learn how to apply their own classroom science knowledge to deliver these lessons. This year our Teaching Buddies will focus their training on each grade level and utilize the past five years of experience to create specific goals and lessons for each classroom. For example, in Kindergarten, we will focus our lessons around observing our natural surroundings (using our five senses). In First grade we will focus our lessons on the local plants and animals. As for Second grade we will apply the knowledge of plants and extend lessons that teach more about plant based foods and the importance of gardening. In Third grade our Teaching Buddies will help students build a greater depth of knowledge of our watershed (hydrosphere). Fourth grade classrooms will begin to map the areas where they live to develop a deeper sense of place. Fifth grade students will utilize computer programs and other forms of technology to document and record the scientific knowledge they have gained in class, which will build their naturalistic intelligence. We will utilize this stair step process to build consistent yearly lessons for future teaching opportunities. This will increase student and teacher depth and build longevity to our ecological and environmental learning.

Allen ISD Goals/TEKS

The two Allen ISD Goals we will focus on are: 1 Transform the traditional classroom into an innovative learning experience that meets the needs of the individual learner. 2 We will foster sustainable opportunities for every person to become a responsible and engaged citizen.

K and 1st grade classrooms should spend 80% of the science curriculum and instruction in field based and/or lab experiences. (2nd and 3rd grade 60%/4th and 5th grade 50%). We have created meaningful instructional opportunities using our field investigation experiences. TEKS K.2-5.2 A, B, & C & TEKS K.9-5.9

Measurements

- We will document the outcomes of our experiences using Google Docs and electronic devices to create virtual journals.
- Informal surveys (created by students through Google Documents) will be given to measure the ecological literacy of the students, parents, and teachers within our school community.
- Informal evaluations will be completed after meetings and learning session.
- Formal assessments will measure student scores on district benchmark tests and state exams. The implementation of the new science TEKS and new STAAR test will give us a good picture of our ecological understandings.
- Use continuous evaluations of our progress through our monthly field investigation and grade level lessons.

Teaching Methods

- We will use methods of place-based education throughout the duration of the project.
- We will continuously use the methods of experiential education.
- We will use lessons of inquiry and discovery learning that follows the 5 E model of scientific learning (Engage, Explore, Explain, Elaborate, Evaluate)
- We will continuously use our Allen ISD curriculum guide

	<p>and documents as reference to our science instruction.</p> <ul style="list-style-type: none"> • We will utilize an Ecological Framework (Biosphere, Lithosphere, Hydrosphere and Atmosphere) “to improve environmental literacy”. The Ecological Framework teaching model has been shared and presented at local, state and national conferences.
Timeline for Project	<ul style="list-style-type: none"> • We will conduct 6 Field Investigations throughout the school year. • New teaching buddies will be trained and assigned to classrooms beginning in October. • Throughout the year students will be trained to present lessons based on the mix of ecological concepts through the grade level calendar. The stair step of concepts were explained in the project description. • Students will document experiences using technology and shared documentation throughout the year. • We will participate in service projects, community events and activities throughout the school year.
Curriculum/System Support	<p>The Ecoliteracy Project @ Olson Elementary will continue collaborative efforts with the City of Allen Parks and Recreation, Community Services, Keep Allen Beautiful, Recreational Equipment, Inc., and Connemara Conservancy. These collaborative efforts involve programs, lessons, teaching and learning opportunities that continue to build environmental/ecological awareness and stewardship while enhancing our districts goals, mission statement, and beliefs by integrating science, math, reading, social studies and language arts throughout each of the grade levels. By building sense of place and a deeper understanding of our ecological address teachers and students will also be able to extend their knowledge base of our community. As mentioned previously, we will utilize this stair step process to build consistent yearly lessons for future teaching opportunities. This will increase student and teacher depth and build longevity to our ecological and environmental learning.</p>
Additional Comments	<p>The first five years at Olson Elementary have proven to be a great success involving our students and teachers in opportunities for training from field scientist and experts in nature education. We have been able to visit facilities and programs that have increased our knowledge base and changed the way we see the world around us. We will continue to utilize the technology and training that we have received throughout the past five years. Students and teachers will also utilize the natural areas around the school to teach concepts in science and ecological understanding.</p>
Instructional Supplies or Resources	NA
Supplies Budget	0
Technology	NA
Technology Budget	0
Staff Training / Staff Development	NA

Training Budget	0
Transportation/Field Trip	6 Field Investigations - 4 buses for each Field Investigation - \$55.00 per bus
Transportation Budget	1320
Other	NA
Other Budget	0
Total Budget	0
Additional Funds	NA