

**Pacific Library Partnership
Innovation and Technology Opportunity Grant Program**

Due Tuesday, December 10, 2013

Please provide the following information in a Microsoft Word document. Send the completed form to Linda Crowe, PLP Executive Director, 2471 Flores Street, San Mateo, CA 94403 or email crowe@plsinfo.org.

1. Title of Project Reading Safari STREAM Van

2. Library/Committee applying for funding Monterey County Free Libraries
Name Be Astengo, Managing Librarian of Outreach and Public Services
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Mailing Address 188 Seaside Circle, Marina, CA 93933

3. Amount of funding requested \$15,000.00

PLP Innovation and Technology Opportunity Grant Program

1. One paragraph project summary.

The focus of the new Reading Safari STREAM Van program is to bring **Science, Technology, Reading, Engineering, Agriculture (& Art) and Math** concepts to preschool children in areas where they are often underserved. During the past decade Monterey County Free Libraries (MCFL) has created partnerships with numerous preschools, daycare centers and Head Start programs in underserved areas throughout Monterey County using our Reading Safari Van. The purpose of the Reading Safari Van has been to promote literacy in underserved areas. We will continue to use the contacts made through the Reading Safari program, as well as its infrastructure to bring new STREAM concepts to young children in the agricultural areas of Monterey County. The van will travel to designated schools for six months throughout the year to introduce STREAM themes through story times, art, craft, and tech activities and developmentally appropriate science experiments.

2. Explain how this project fits with the library's strategic directions.

The vision of Monterey County Free Libraries is to have “a community where everyone has the opportunity to achieve their potential and pursue happiness.” The Strategic Plan works to continuously improve services and programs for all our library users. The 2013-2016 Strategic Plan specifically calls for MCFL to “Redefine ‘Literacy’ and goals of the program to include new elements and target audiences.” The new elements of literacy will include actively using all the STEM (Science, Technology, Engineering and Math) concepts along with Reading and Art. Furthermore, because we live in a rural and agricultural area, the science concepts we include will be related to farming and the natural world so that children can see aspects of their lives reflected in the story time programs.

3. A description of the proposed project including the population served and the demographics of that population.

MCFL has created partnerships with preschools, daycare centers and Head Start programs throughout the Salinas Valley from King City to Castroville in underserved, predominantly Spanish speaking areas in Monterey County. Many of the schools we work with have children who have been determined to have economic or other needs. Starting with the model of our current Reading Safari Van, which promotes literacy through bilingual story times and crafts, we will add STREAM themes. The themes will enhance these programs with science, technology and agriculture focused story times, and deliver them to the partner schools. We will select schools with which we have had successful partnerships in the past to add the new STREAM concepts to their programs. The Reading Safari STREAM Van will visit 10 partner schools once each month for 6 months with a different curriculum. The curriculum ideas will include natural science, physical science, biological science and chemistry. Each program will include

story time (reading), a simple science experiment (science, technology, agriculture) in which the children can participate. The story times will also include songs and an art/craft activity, which will include math concepts. At the end of the story time and science activity, children will be able to check out books to take home from the Reading Safari Van. The books stocked on the van will emphasize and reinforce the STREAM themes. Teachers at the preschools will be given a kit with books and toys to reinforce the theme throughout the month until the Reading Safari STREAM van returns with the next theme.

4. The goals and objectives of the project.

The goal of the project is to introduce STREAM and specifically science, technology and agriculture concepts to children, who live in mostly agricultural areas, are typically economically underserved, may not have the opportunity to visit libraries, may not be read to at home and may never visit museums. Agriculture fits in well with science, technology and engineering concepts. We will include basic educational electronic toys to introduce children to simple computers and technology. Several toys will be left at each of the centers every month for children to explore and play with. In addition our goal is to recognize and affirm the importance of agriculture in our lives and the lives of the young children by creating themes on these topics. We intend to create programs that are not only educational, but fun, playful and participatory to enhance the learning experience.

5. The project timeline (activities).

The program will be 6 months long and will take place during the months of October, November, January, February, March and April. This timeline will fall within the school year and give us time to coordinate with the teachers at the schools. We chose to take the month of December off because schools often close for a couple of weeks and school themes tend to focus on holidays.

We will introduce a theme on a Tuesday or Wednesday each month via the Reading Safari STREAM Van to the 10 schools or centers with which we partner. We will visit each of the 10 schools each month with the same theme.

The sample timeline with an example program will look like this:

October: Physical Science Concept: **Motion:**

- Things move in many different ways.
- Objects need a push or pull to start, stop, or change their movement.
- Simple machines help move objects.
- Friction can change motion.

Introducing the concept of motion: Books:

- *Go, Go, Go!: Kids On the Move* by Stephen R. Swinburne
- *Wiggle* by Doreen Cronin

- *What Do Wheels Do All Day?* by April Jones Prince
- *Wheels Around* by Shelley Rotner

Experiment: Ramps & Friction:

- 2 smooth-sided boards
- 2 different-size blocks to support ramps
- toy cars, trucks or tractors
- 1 rough sided board

Craft Activity incorporating math concepts:

- Paste together a tractor using various shapes (tractor outline on paper)
- Rectangles
- Circles
- Triangles
- Semi-circles

November: Water Cycle (rainy season begins in Monterey County)

January: Nature: Color and Sounds in Nature

February: Animals in Nature

March: Farm Animals

April: Plants: Things that Grow

6. The evaluation of the project.

To evaluate the project we will start by creating and giving a baseline assessment to the teachers at the partner schools inquiring about the curriculum they use for the classroom, if any. We will ask questions about frequency of reading to children and use of math and science concepts in the classroom. At the conclusion of the program we will again survey the teacher to see if there is an increase in how often they read to their students and also see if they are incorporating math, science and agricultural concepts more frequently and the frequency of incorporating art activities in the classroom.

To evaluate the children, we will talk with them about their awareness of books and letters, their ability to count and familiarity with various objects and simple science concepts including animals, vehicles, vegetables, fruits and the natural world. Again at the end of the 6 months, we will reassess the children using the same tools to see if their awareness and abilities improved. We will see if they can identify numbers, letters and simple science concepts.

7. The project budget.

Ideally we would like to fund a part time staff person at the Library Assistant 1 level for 14 hours per week for 34 weeks or 7 months for this project. The person will be trained and introduced to the program concepts and will be asked to help develop the

program under the direction of the Supervising Librarian. The curriculum we will use for this program will be drawn from the Educator's Guides developed by the Florida Museum of Natural History for their MESS program: Marvelous Exploration through Science and Story, and other resources.

The budget will include books specifically chosen to reinforce the STREAM curriculum and will include simple non-fiction as recommended by the Core Curriculum as well as easy picture books with engaging stories. We will also purchase various toys, equipment and supplies to assist in creating the hands on science experiments for the children.

Budget:

Library Assistant 1(\$18.59/hour x 14 hours/week x 34 weeks)	\$ 8,848.84
Supervising Librarian (\$30.00/hour x 2hours/week x 34 weeks)	\$ 2,040.00
Books to supplement STREAM curriculum	\$ 2,500.00
Leap Frog educational toys	\$ 1,000.00
(Touch Magic Counting Train: \$25 x 20)	
(Touch Magic Learning Bus: \$25 x 20)	
Science supplies (toys, boards, etc.)	\$ 1,000.00
Customized Tote Bags (for themed kits)	\$ 350.00
Gas and mileage (296 miles/month)	\$ 1,149.33
Craft Supplies (various)	<u>\$ 500.00</u>
	\$ 17,388.17*

*MCFL will supplement grant funding to cover project costs that exceed the \$15,000.00 request