

Rotary Club: Project Title: Bi-Lingual Science Literacy: "Gentle STEM Learning for Early English Learners" Progress Report X Final Report

1. Briefly describe the project. What was done, when and where did project activities take place, and who were the beneficiaries?

This project was introduced at the fall OUSD opening meetings with a presentation entitled "Gentle STEM [Science, Technology, Engineering and Math] Learning for Early English Learners". A workshop was held for teachers which provided training and clarification of goals and explication of provided materials. Please see photos. Teachers indicating interest were subsequently contacted.

Materials were developed for the program by myself (Chemistry Teacher VPHS), translator Brenda Ochoa (Chair Foreign Language at VPHS) and Pablo Larios (Electronic Media Instructor VPHS). Pedagocally, our concern centered on the fact that the education of second-language learners in STEM content must focus on their difficulty accessing new concepts which use technical terms not commonly used in everyday language. The project was developed Aug/Sept and the books arrived in Nov/Dec.

Participating teachers and their early elementary 2nd language learners (from five elementary schools and one pre-school) were provided with 2 "ABC" books for each student, presenting a dual-language literacy-based introduction to Science concepts entitled "A is for Atom/A es por Atomo" and "B is for Biology/B es por Biologia." Implementation was aided by VPHS students from INTERACT and ACS clubs. Serrano Elementary generated a lot of excitement and was the subject of several newspaper articles (please see photos and support documents for the write-ups). Accolades from all participating schools was gratifying, very positive; teachers, students, and parents as well, were excited about the positive results of the STEM materials, including both attitude improvement toward Science as well as easing vocabulary introduction!

- 2. How many Rotarians participated in the project? seven
- 3. What did they do? Please give at least two examples.

 Principal Ed Howard, VPRC Rotarian, (principal VPHS), provided outreach to schools for contact with elementary teachers.

 Marianne Koepnick, VPRC Rotarian, provided workshop support and contact/delivery of materials to involved schools.

 Craig Beinlich, VPRC Treasurer, provided constant support dealing with needed checks for companies and reimbursements.

 Terri Brooks, VPRC Rotarian, worked with media to advertise and report on the project implementation and results.
- 4. How many non-Rotarians benefited from this project?

 Hundreds of 2nd language students (and their families as well) benefited from the materials. There will be an ongoing legacy since the classroom teachers involved will be able to continue using these books. The schools involved were: Sycamore Elementary, West Orange Elementary Trans., Orange Pre-K, McPherson Elementary K-2, Fairhaven Elementary, and Serrano Elementary
- 5. What are the expected long-term community impacts of the project?

The long-term goal of the project is to develop and introduce a STRUCTURED FRAMEWORK OF SCIENCE CONCEPTS to young learners in a way that, through rhymes and bright pictures, ENCOURAGES ASSIMILATION AND RETENTION. Concepts and the supporting math operations used in STEM programs use "Tier Three" vocabulary. Special focus was on developing bilingual materials. Even young learners who have technically tested out of Spanish Language, and have been "recategorized" as able to be "immersed" in English course offerings in STEM content, still find technical terms in STEM programs very difficult to understand without the support of contextual cues and affective support. In addition, the project is intended to have lasting effect from the materials continuing to be available in the classrooms.

Most importantly for our young project participants (learners), our goal is to have provided 1.) a lasting positive attitude toward the sciences, as well as 2.) a foundational vocabulary, which will serve them well in their future STEM classes. We believe we have more than achieved these goals and thank Rotary Matching Grants for the opportunity to have served our community in this way.

- 6. If a cooperating organization was involved, what was its role?
 - 1. Villa Park High INTERACT Club helped with workshops;
 - 2. Villa Park High ACS Club helped in classrooms with individual learners;
 - 3. OUSD Elementary Schools implemented the project in elementary classrooms.

Financial Report – Be sure that Income equals Expenditures!

7. Income	Amount	
District Grant funds approved by the District (original budget)	2282.00	
2. Club contribution (original budget)	2318.00	
3. Other funding (specify) additional club contributions (added to budget)	269.60	
Total Project Income	4869.60	
8. Expenditures - please be specific and add lines as needed - receipts must be attached 1. Initial Book order 2. Computes program for Introductory Representation of program observetors.	2249.75	
Computer program for Introductory Powerpoint and animation of program character	700.00	
3. 2 nd book order	1244.92	
4. Workshop/distribution printing cost	55.07	
5. Serrano elementary teacher materials for classroom implementation	216.00	
6. Final order + implementation aides/posters for classes (123.90 + 279.96 = 403.86)	403.86	
Total Project Expenditures	4869.60	

9. By signing this report, I confirm that to the best of my knowledge these District Grant funds were spent only for eligible items in accordance with Trustee-approved guidelines, and that all of the information contained herein is true and accurate. Receipts for all grantfunded expenditures have been provided to the district. I also understand that all photographs submitted in connection with this report will become the property of RI and will not be returned. I warrant that I own all rights in the photographs, including copyright, and hereby grant RI and TRF a royalty free irrevocable license to use the photographs now or at any time in the future, throughout the world in any manner it so chooses and in any medium now known or later developed. This includes the right to modify the photograph(s) as necessary in RI's sole discretion. This also includes, without limitation, use on or in the web sites, magazines, brochures, pamphlets, exhibitions and any other promotional materials of RI and TRF.

Certifying Signature	Dr. Línda A. Bartrom-Olsen	Date:	May 7, 2016
Print name, Rotary title, and club	Dr. Linda Bartrom-Olsen, Youth Chair, Villa Park Rotary Club		