

December 14, 2001

TO: California Department of Food and Agriculture  
Fertilizer Research & Education Program  
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ATTN: Steve Braun

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SUBJECT: "From The Ground Up" - A Hands-On Guide to School Gardening  
Final Report  
Program Completion  
Contract Number 00-0072

### **PROJECT OBJECTIVE**

The purpose of the "From The Ground Up" video was to provide a visual, step-by-step, "how-to" guide of planning and implementing a school garden. Through the video and guidebook, teachers and students would be able to identify with the model used in the video: an actual teacher and students at a school campus. Moreover, teachers and students would increase their knowledge and ability to manage a garden, as well as understand the relationships between soil, fertilizers, best management practices, food production and the environment. The California Fertilizer Foundation (CFF) would ensure that the video achieved this goal through the following objectives:

- Objective 1.* Develop a step-by-step, "how-to" video and guidebook that show proper soil, planting, fertilization and watering techniques for a school garden.
- Objective 2.* Distribute the video to K-12, California teachers through a variety of methods (existing organizations, Internet, conventions, etc.) free of charge for the initial 1,000 printed (additional copies would be made at a nominal, at-cost fee).
- Objective 3.* Conduct a follow-up survey with teachers and students to measure how the target audience's understanding of the relationships between soil, planting, fertilization, watering and, in general, best management practices has changed/improved.

## **EXECUTIVE SUMMARY**

The video and guidebook set, entitled "Seeds of Knowledge... for a Harvest of Understanding", was completed in June 2001. Following the creation of the video (Task 1) and creation of a corresponding brochure (Task 1), the most important goal was to distribute the set to teachers throughout California (Task 2). This phase of the project (Task 2) involved primarily working with the following agencies/ organizations in the distribution and evaluation process: California Department of Education; California Foundation for Agriculture In The Classroom; and through a number of CFF School Garden Program contacts.

The goal of Task 3 was to evaluate the project's success. The final phase of the project (Task 3) was to, as part of the initial mailing: 1. Distribute an evaluation form for the video and guidebook; 2. collect the data; and 3. write a final report on the project for submission to FREP.

## **WORK DESCRIPTIONS**

**TASK 1: Create Video on Nutrient Management, Safe Handling & Establishing a School Garden**

The purpose of this task was to develop and produce a 13- to 15-minute video and accompanying video booklet on the basics of starting a school garden, including the role of fertilizers, soil sampling, nutrient management and environmentally-sound handling and use of fertilizers. The subcommittee met, wrote and edited the video outline, text and established a date for filming. The video then was finalized before being reproduced for distribution. An interim report was submitted to FREP in August 2001.

**TASK 2: Promote and Distribute Video and Video Booklet**

The purpose of this task was to promote and distribute the Fertilizer Research and Education Program video and video booklet to the first 1,000 teachers free, and at-cost thereafter. The first 1,000 teachers were selected from a list of teachers already selected to receive a California Department of Education "Garden In Every School Program" grant, a California Fertilizer Foundation School Garden Grant and teacher Ambassadors from the California Foundation for Agriculture In The Classroom. Order forms were then distributed to additional teachers through aforementioned educational organizations; awareness was also raised through news releases and participation in agricultural education conferences and training seminars throughout the state.

**TASK 3: Conduct a follow-up survey with Teachers who received the first 1,000 videos and video booklets ; as necessary thereafter.**

The purpose of this task was to conduct follow-up surveys with the initial 1,000 teachers who received the video and video booklet, and to submit a final report to FREP. The purpose of the survey was to measure what the teachers' level of understanding about nutrient management and its application to gardening was prior to and after watching the video. The survey results, following the outline of questions, is noted below:

California Fertilizer Foundation  
 Fertilizer Research & Education Program  
 Video/Brochure Review: "Seeds Of Knowledge... For A Harvest Of Understanding"

Thank you for your help in completing this survey. Your responses will help us improve future program and activities.

**Using a scale of 5 to 1 where:  
 4 - 5 = "strongly agreed"  
 3 = "agreed"  
 1 - 2 = "disagreed"**

<i>Video/brochure fulfilled my expectations</i>	75% strongly agreed; 25% agreed
<i>Video/brochure provided useful information</i>	80% strongly agreed; 20% agreed
<i>Video/brochure provided useful contacts</i>	70% strongly agreed; 30% agreed
<i>Focus on nutrient information was adequate</i>	90% strongly agreed; 10% agreed
<i>Focus on safety was adequate</i>	80% strongly agreed; 15% agreed; 5% disagreed
<i>School gardening basics were provided</i>	87% strongly agreed; 13% agreed
<i>I understand now what to do/what not to do</i>	85% strongly agreed; 15% agreed
<i>I feel more confident in starting a school garden</i>	75% strongly agreed; 15% agreed; 10% disagreed
<i>Video length was:</i>	90% -just right      10% - too short      0% - too long
<i>Video level was:</i>	97% - just right      3% - too simple      0% - too complex

*What were the strengths of the video and brochure (anecdotal comments)?* "the video gave me some great ideas"; "I now know what I need to do before I start putting a garden at my school"; "I never considered or understood the basics of fertilizing to be that critical until this video"; "I know that parents will feel better that I take the use of fertilizers and chemicals more seriously"; "I liked that the concepts provided were basic enough that I could go out and do it"

*This video could be improved by "do a follow-up one geared for kids"; "add more resources at the end"; "show other types of gardening, like hydroponics"; "think about doing one every year and show alternate kinds of gardening at schools"; "show how gardening can be used in the classroom more"*

To date, CFF has received evaluation data from approximately 25% of the teachers who received the video and brochure. The consistency of respondents has continued to be overwhelmingly positive.

A majority of respondents stated that the video set was useful, informative, easy to follow and gave them several ideas about gardening, particularly in terms of safety and cost. We believe that, although the total numbers of responses may be low, they indicate an overwhelmingly positive response to the first video of this kind produced in California for teachers. Recipients stated several times that they would like to see additional informational items on gardening be produced.

## **RESULTS, DISCUSSIONS AND CONCLUSIONS**

As stated previously, the video and brochure were viewed by more than 1,000 California. Of those who received the video, one-fourth were contacted. Of that one-fourth, 99% had at least one positive thing to say about the video, many noting that it provided useful information that was easily understood. These responses indicate that the goals set forth in this project have been met. The project reached teachers and conveyed plant nutrient and school gardening information in a way that increased their knowledge and understanding. Clearly, the project cannot reach all teachers in California who are working on school garden projects. However, the reach of this project has been significant, providing information on safety, plant nutrients and gardening basics to those who may have little understanding of such concepts.

Respectfully Submitted,

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Project Coordinator