

Final Project Report

Organization: Partners In Conservation
Project Name: Development of Conservation Week as Educational Pilot Program
Project Number: 2003-PIC-348-P
Reporting Period: 07-01-07 through 09-30-07
Project Contact Name and Information:
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PROJECT REVIEW:

What measurable goals did you set for this project and what indicators did you use to measure this performance?

The goals set for this project as listed in Purchase Order #4500025879-003 were:

- Goal #1: To develop a Desert Conservation Week Program for the participating elementary schools; to devote a week to learning about the desert we live in and learning how best to respect, protect, and enjoy our desert.*
- Goal #2: To test pilot program in the rural communities of Moapa Valley and Virgin Valley.*
- Goal #3: To evaluate the Desert Conservation Week Program and make recommendations for future implementation of said program.*

Goals #1 and #2 are difficult to quantify and measure; when this project was first conceived in 2002-2003, the Desert Conservation Program had not evolved to the point it is today wherein accountability and the ability to quantify and measure progress and success are of paramount importance. Additionally, the Adaptive Management aspects of the Desert Conservation Program were not developed and applied to each project as is standard today. It is interesting to reflect back on the years 2002-2003 and to see the immense growth and maturing of the DCP from then until now; the progress of the DCP has been remarkable and the program's focus on accountability, need to measure and quantify success and progress, and need to evaluate a project's accomplishments and failures should be applauded and adhered to. Therefore, to the best of our ability, PIC will attempt to measure and quantify each goal.

Goal #1: PIC introduced the Desert Conservation Week Educational Program into the four rural elementary schools in northeast Clark County, i.e., Virgin Valley (Mesquite) Elementary School, J. Bowler (Bunkerville) Elementary School, G. Bowler (Logandale) Elementary School, and Ute Perkins (Moapa) Elementary School. Approximately 105 teachers were contacted and received instructions, materials, and assistance, thereby delivering the components of the Desert Conservation Week (DCW) to over 105 classrooms. Over 2,200 students were thus reached and received educational instruction and materials relating to the message, 'respect, protect, and enjoy our desert'. This goal can be measured because over 105 classrooms, plus each school's office and library received a Teacher's Activity Guide Book; a DVD containing 6 videos (the Desert Conservation Program's 6 Video series) focusing on the message of 'respecting, protecting, and enjoying our desert'; instructions and materials for each student to participate in the Calendar Coloring Contest with the theme being, 'How I respect, protect, and enjoy MY desert'; and instructions and materials for each class to receive the Mojave Max

lesson. Extra Teacher Activity Guides and DVDs were also placed in each office for substitute teachers and replacement copies.

Additional quantification that the Desert Conservation Week Educational Project was delivered to each classroom is found in the fact that PIC met with many of the teachers individually or in the smaller weekly group meetings where all the teachers of a particular grade would get together and focus on issues relevant to their specific grade. These smaller meetings were the most effective way to reach teachers; at these meetings they had more time to review materials, ask questions, and make future appointments for Mojave Max lessons, etc.

Indicators of the accomplishment of Goal #1 are the physical delivery of the above listed materials, i.e., Teacher Activity Guide, DVD of the DCP 6 Video Series, Calendar Contest materials, and Mojave Max Lesson materials and the use and implementation of those materials into the classroom and lesson plans of each teacher.

Goal #2: Testing this pilot program in the rural communities of Moapa Valley and Virgin Valley is a somewhat difficult goal to address and measure. Test what? Test the fact that this program CAN be implemented in the rural communities? The fact that the program was accepted, implemented, and used in each of the four schools is indicative of the pilot program being initiated and this goal being achieved. That is a given. Discussing the particulars of the pilot program is better answered under Goal #3, evaluation of the program.

Perhaps discussing the 'ease' of getting this pilot program into the 4 elementary schools would provide helpful information to the Desert Conservation Program and more completely satisfy this goal. Getting anything into the schools is NOT easy anymore. Schools are very busy complying with the No-Child-Left-Behind Act and other mandates; this leaves little if any time for extra activities, no matter how important the subject content. If PIC had not approached the schools over 4 years ago about this project and kept in continual contact with the schools regarding this project, it is doubtful if the Desert Conservation Week would have ever come to fruition.

Also, the personal relationships between PIC and the office staff, some teachers, and some of the administration of each school really was a big factor that cannot be underestimated. If we had not personally KNOWN key people at each school, it would have been very easy for each school to say 'great idea, but we just don't have time for this project'. A perfect example of this is Virgin Valley Elementary School; I knew very few people at this school and since I started talking about this project over 4 years ago, the principal (who was one of the few people I knew) relocated to another school. At the start of this year, in September, when I approached the staff, no one would commit that we could do this project. I focused on getting the program started in the other schools and hoped that I could make some headway eventually with Virgin Valley Elementary School (VVES). Several weeks went by and I was still having no luck and getting quite upset about this.

At that exact time we hired Nannette Nelson who lived in Mesquite; she was primarily hired to work on developing restoration projects with the City of Mesquite on the Virgin River, but I wanted her to know what all PIC was doing, so I asked her to accompany me on one of my Desert Conservation Week days. At VVES, where I was getting nowhere, Nannette knew everyone. Turns out, she was very actively involved with the school because her daughter had attended school there; she personally knew everyone, the new principal, all the office staff, almost all of the teachers. Because of that reason alone, we were able to get the Desert Conservation Week program initiated in VVES. And because of Nannette's relationships, the DCW was very successful at this school.

Goal #3: Evaluating the Desert Conservation Week program can best be measured and quantified by summarizing the comments on the Teacher Evaluation Form. And who better to evaluate the DCW program than the teachers? Additionally, a summary of teacher evaluations is a specific item to be addressed in Deliverable #3, Final Project Report. Therefore, please find below, each question asked on the Teacher Evaluation Form and a summarization of answers.

Is this guide duplicating activities or information you already use?

Over 90% stated that the guide does not duplicate activities or information; most additional comments stated that the guide supplements what teachers already use or provides new ways of presenting information.

What do you like or dislike about the guide?

Over 90% liked the teacher activity guide, most really liked it! The most common 'dislike' was that the pages were hard to turn as the book was too full. Multiple 'like' comments were that the activities had a lot of variety and were easy to use. Some teachers commented that the activities were great to use as a 'filler' if they had some extra time between lessons or while waiting for activities outside the classroom to begin. Many teachers commented that they liked the copyright information on the back of each activity; in fact this was one of the most verbalized comments we heard as we met with teachers.

Were the materials needed for the activities easily available?

Again, over 90% responded that the materials needed for each activity were already in their classrooms. Teachers stated they appreciated this.

What would you recommend to make the guide easier to use, more applicable to your needs, so that you would use it more?

Many left this question blank. Of those that answered this question, almost 60% said the Activity Guide needed to be in a bigger binder so that the pages turned easier. Several teachers responded that the activity pages would be better if they were on heavier paper so that the pages wouldn't tear or rip so easily; also the pages would last longer when they made copies if the activities were printed on heavier paper. One teacher recommended a specific Table of Contents that listed each Activity Name and quick description so that all the activities would be listed on one page for quick reference.

Does the Desert Conservation Week Project provide you with new information about the Mojave Desert?

Almost 70% stated that they found new information about the Mojave Desert in the Activity Guide; over 90% stated that the information in the activities was presented in new ways that students would be receptive to receiving.

Does the project assist you in meeting Nevada State Standards for your grade level?

This question was also left blank on some forms. Of those that responded, about 30% replied 'N/A, not applicable'; about 20% said 'no' or 'they didn't know' and about 50% said 'yes'.

Did the project create too much disruption with your classroom routine?

Over 90% stated 'no'.

Did your students learn anything from this project?

Over 80% stated 'yes'. Some said 'probably'; some said 'not sure'. Several comments were 'that the diversity of activities is great'; 'don't need coloring pages as students have plenty to color already'; 'loved the science activities'.

Did the Calendar Contest help your students express their personal connection with their Mojave Desert?

Some also left this blank. Of those responding, about 60% said yes. About 25% said they didn't have time to do the coloring contest yet; about 15% said they weren't sure or simply 'no'.

What would you suggest that would enable students to make a personal connection with their Desert?

Only about 30% responded to this question; the majority of teachers left this blank. Of those responding, 20% said the calendar contest, the Mojave Max lessons, and the activities were all good ways to get students personally connected with their desert; About 15% said hands-on activities (some are in the activity guide) would help; some said repetition was important; over 20% said the family had to be involved for a student to make a personal connection; and about 30% said that their students already had a personal connection to the desert as that is where they live, play, spend time, etc.

Final comments, recommendations, improvements.

About 50% of teachers did not respond to this item either; most of those that did respond

made general positive comments like 'great project', 'loved the activity book', 'thanks for the activity book', 'I want the Mojave Max lesson, but not until January', 'my students love the activities we have done'. Over 90% of those that did respond to this question, were positive; only about 10% of the comments were negative, such as 'the book is too hard to get pages out', 'use a bigger binder next time', 'no time to do the calendar contest', 'I would like more info on the plants and animals in the activities', 'I hate to waste this nice activity guide, but I don't have much time to do these activities'.

There were no milestones assigned to this project and only three deliverables:

Deliverable #1: Planning Report and Teacher Guide:

This deliverable was completed and accepted by the Clark County DCP; a planning report was produced and submitted that identified a schedule for the implementation of the DCW pilot program. Included in this report were the estimated number of students and teachers that this project would reach. The actual number is at least 105 teachers and at least 2,200 students.

A Teacher's Activity Guide was also produced, submitted, and accepted by the DCP; contents of the guide are:

Index/Table of Contents:	lists each section
Introduction Page:	introduces concept of guide
Acknowledgement Page:	acknowledges each school, the DCP, other participants
(The Activity Section broken down into the following categories)	
Our Desert Activities:	19 pages; 08 varied activities
Safety in the Desert Activities:	10 pages; 06 varied activities
Wildlife in the Desert Activities:	11 pages; 07 varied activities
Plants in the Desert Activities:	09 pages; 05 varied activities
History of the Desert Activities:	15 pages; 10 varied activities
Other Desert-Related Activities:	38 pages; 34 varied activities
Coloring Page Activities:	13 pages; 13 coloring pages of desert plants & wildlife
Subtotal activity pages: 115 pages, 83 separate activities	
Reference Page:	lists other educational sources for desert materials/lessons
Bibliography Page:	lists all sources used
Contact Page:	quick list of environmental educator's contact info

Total Guide pages: 127 (includes each activity section tab page)

Deliverable #2: DCW Pilot Project Implementation:

This deliverable was completed and accepted by the Clark County DCP; a report was prepared, submitted, and accepted which detailed the implementation of the pilot project. The following sub-categories of this deliverable were also accomplished, identified, and explained in detail in that report:

Provide teachers with information (the following items were given to each teacher)

Description of program and general information regarding DCW

Teacher Activity Guide

DVD with DCP's 6 videos about respect, protect, and enjoy the Mojave Desert

Calendar Coloring Contest

Mojave Max Lesson information

Contact list of environmental educators

Supplemental materials for activities in Teacher's Activity Guide

Visit Schools

Deliver program

Distribute and collect evaluation forms

Deliverable #3: Final Project Report

This deliverable is this report; upon submittal and acceptance by Clark County DCP, this deliverable will be satisfied. This deliverable also has sub-categories: (following the Final Project Report Format, these sub-categories will be addressed under appropriate sections in this final report)

Summary of teacher evaluations (under PROJECT REVIEW, Goal #3)

Final statistics of students reached (under PROJECT REVIEW, deliverable #1)

Final statistics of teachers reached	(under PROJECT REVIEW, deliverable #1)
Hours spent on project	(under PROJECT STATUS/ACCOMPLISHMENTS)
Evaluation of effectiveness	(under RESULTS/EVALUATIONS OF RESULTS)
Significant moments	(under EVALUATIONS/DISCUSSION OF RESULTS)
Recommendations for improvement	(under RECOMMENDATIONS)
2 project photos	(under EXECUTIVE SUMMARY)

As detailed above, and in response to one of the sub-questions under 'Project Review', all goals/objectives, and deliverables have been met with the submittal and acceptance of this Final Report. An additional sub-question that has not been directly answered in the verbiage above is 'If there were additional accomplishments, describe and explain....'. There is an additional accomplishment that PIC would like to report; that being, the interest in the Teacher's Activity Guide outside of the classrooms. This interest has been generated through word of mouth, some of which came about through PIC reporting on this project to other groups, etc. and some of which came about because of teachers, school staff, etc. telling others about the teacher's guide. Girl Scout groups, Boy Scout groups, pre-schools, and after-school programs (including the Henderson Park and Recreation Dept.) have all asked for copies of the guide or want copies of some of the activities. PIC displayed this project and the activity guide at our booth at Nevada's Rural Planning Conference, held in Ely recently. A non-profit group working on parks in a northern rural county asked for a copy. After PIC finished this program in the 4 elementary schools and after giving each school some extra copies, PIC is handing out the remaining 20+ guides that are left over. (PIC is holding several additional guides if the DCP wants any extra copies.)

And finally, the Moapa Valley High School's Ag Farm (Pirate's Cove, an Agri-Culinary Enterprise) is planning on Vegas schools touring the farm this spring. MVHS received funding to pay for the expenses of bussing students to and from the ag farm, the principal is presenting all Clark County principals (K-12) with a video and information about the ag farm and why their school should visit the farm during the principal's meeting in January. Grant Hanevold, MVHS Principal wants to give each visiting school handouts to take back to their classrooms; when Mr. Hanevold saw the Teacher's Activity Guide, he asked if PIC could go through our guide, pull out 20 or so activities that focused more on conservation and agriculture and let MVHS provide those activities to the teachers as they visited the ag farm.

As PIC is spreading information about this pilot project and handing our Teacher Activity Guides to others outside the original scope of work, we are mindful to acknowledge our partners, the funding source of this project, and Clark County DCP's role in this project.

PIC also plans on visiting the Littlefield/Beaver Dam Elementary School in Littlefield, Arizona, informing them of this pilot project, and handing out Teacher Activity Guides to those teachers. PIC will also extend our invitation to do Mojave Max Classes in their school. Although this school is clearly not in Clark County, it is definitely located within the Mojave Desert and thus could benefit from this information and the links with the environmental education community that PIC can provide.

To what extent has your project achieved these goals and levels of performance?

Insofar as it is measureable, PIC's Desert Conservation Week project has achieved 100% of our goals. The DCW was developed, implemented, and evaluated per the itemized deliverables. PIC so believed that the DVD of the DCP's 6 videos contained such great educational messages and was presented in such a positive manner that rural children would be very receptive to those messages, that PIC spent almost \$1,000 and had Joshua Tree Productions make over 200 copies of that DVD. A copy of that DVD was inserted into every Teacher's Activity Guide, so that DVD is actually **IN** every northeast Clark County elementary school classroom. We believe this demonstrates our commitment to this project and demonstrates a high level of performance from PIC on delivering the message of 'respect,

protect, and enjoy our desert' to rural students. PIC's commitment and belief in the importance of the DCP's message 'respect, protect, and enjoy our desert' is further demonstrated through PIC's Calendar Coloring Contest wherein PIC sought to help each student develop a personal relationship with the Mojave Desert by focusing the Calendar Coloring Contest on the statement, 'How I respect, protect, and enjoy MY desert'. Several calendars are included for the DCP files; if you would like more calendars, for display, to hand out, or for whatever reason, please let us know, we made extra copies for such circumstances.

Did the project encounter internal or external challenges?

There were no challenges, internal or external, that prevented this project from successfully being completed. However, there were several challenges. Internally, as detailed in the quarterly report of 04-01-07 through 06-30-07, the health problems and death of my mother significantly delayed the start of this project. The DCP was very gracious in extending the project's timeline, this resolved that internal challenge.

Another small challenge was how we assembled the activity guides; in retrospect, it is far better to collate the guides, THEN punch the binder holes rather than punching holes first, then collating.

The biggest internal challenge, by far, was getting the teachers to complete the teacher evaluation forms. Pulling teeth would have been easier. I originally thought (foolishly) that this would be easy; I based that thought on being involved with the Mojave Max Lessons in the Classroom project wherein teachers had evaluation forms to fill out. And it was a small struggle to get them to do so, but many did. The problem, I thought, that prevented all of them from filling out the forms was that there was little time after the lesson was presented for the teacher to fill out the form. The classes always had to quickly move into another lesson, get ready for art class, recess, etc., so I thought—where our project did not have that immediate time restraint—that it would be easier to get them to fill out the forms. WRONG! I now see the wisdom in having them fill out the forms right then while you are standing in front of them. Otherwise, it doesn't get done. PIC invested more time in returning to the schools, making phone calls, 'catching' up with teachers before school, during lunch, after school, to get them to fill out the forms. This was the biggest challenge, by far, and made all other challenges small in comparison; indeed, getting a sufficient number of evaluation forms filled out easily delayed this project's end date (final report) by close to a month.

The main external challenge was alluded to earlier; that of the No-Child-Left-Behind Act and the impact this has on a teacher's 'free' time in the classroom. That program has certainly required the schools and teachers to re-evaluate everything that comes into their classroom as they have so much of their time locked up with testing and other requirements of this federal program.

How were they addressed?

How these challenges were addressed is briefly included with the above discussion, however this question will be more fully answered below.

The first challenge, that of me getting very behind in this project (and other projects) because of my mother's health, was easily addressed by the DCP being so easy to work with and so understanding of the situation. DCP staff was gracious, most helpful, and efficient in extending the timeline of this project for which PIC is deeply grateful.

The second challenge, of book assembly, wasn't really addressed as the books still got assembled. The lessons learned from putting the books together, is really the way this challenge was addressed, so that when PIC does another 'book' or when someone else, reading this, does a book, they and we, can do it better. The main issue was punching holes first, then collating the book. The small variations in where the holes were punched made collating and inserting the pages into the

binder 'fun'. It is far smarter to collate, then punch holes. Also, PIC ordered the binders early in the summer as we found a sale and got them for more than ½ the regular price. This was a nice savings, but in retrospect, ordering the binders should not have occurred until the pages were finalized and an exact number of pages and thicknesses of the various papers were determined. THEN, order the binders; with today's efficient delivery of office supplies, the binders would have arrived in less than a week. The savings from ordering them on sale, in the long run, did not outweigh the ease of being able to use the guide. The guide is usable, of course, but the binder should have been the next biggest size to make using the guide 'perfect'. As it is, PIC recommended to teachers that they remove the activities they most likely would not use or take out the activities that were not pertinent to their student's age. Doing either of those suggestions, left more room in the binder and made it easier to turn pages.

The biggest challenge, by far, was getting the teachers to fill out the evaluation forms. I grossly under-estimated the time and energy this would take. A mistake I will not repeat again as this single challenge delayed the completion of the project by nearly a month. This challenge also cost PIC much in personnel time, travel expenses (gas) and Advil (stress headaches). Everything was going so well and very close to the timeline, and then it was like big giant brakes got applied and the project literally screeched to a halt. The project was very well received, got many compliments, and teachers were actually using the guide, scheduling Mojave Max lessons, doing the calendar coloring contest, but NOT doing the forms. They hate doing forms; they do many forms in their daily work lives, another form—one the school district did not require them to fill out—well, that was a form that was easily ignored. The estimation, in Deliverable #2, of getting 75% of the evaluation forms filled out, was entirely too high. With all the extra time and energy devoted to this singular issue, PIC was still only able to get around 35% to 40% of the teachers to return their forms. It is possible that we could get more, but then that impacts the completion of this project, and it is considerably overdue as it is. So we decided to go with what we have received to date.

To answer the direct question of how this challenge was addressed, it was addressed through hours of trips (and phone calls) to the various schools, at different times, on different days—to talk to different teachers, to take additional copies and pens and implore them to please take a few minutes and fill this out NOW. Still, many teachers politely resisted and said 'they would fill them out later, come back in a few days for it', so we did. And we came back again and again. That was the only way to address this problem now, but the next time, PIC will have some kind of 'carrot' that a teacher will at least be interested in, to give the teacher when the form is filled out and returned. And the other way to address this challenge the next time we need forms filled out is to schedule considerably more time for this phase and to not have such high expectations of the number of forms that would be returned.

The main external challenge, the No Child Left Behind Act, cannot be addressed at our level. First, being aware of this act and realizing that it (along with the other federal and state mandates placed upon the educational system today) is going to impact any outside educational efforts is an important step that everyone must realize. In a way, just that realization is one small way of addressing this challenge. The best way of addressing this challenge, though, is personally knowing enough of the office staff, administration, and/or teachers to get our foot into the door of each school. I see NO way that this project could have been implemented if we had gone in 'blind' without knowing anyone and without the continual contact with the schools since this proposal was first conceived and written. Having a school's informal agreement to participate several years ago, and keeping in touch with them certainly helped, but the biggest factor is knowing key people personally. The office manager at Perkins lives across the street from me, the office manager at Bowler in Logandale is a life-long friend I went to school with; the office manager in Bunkerville is a relative as was the principal at Virgin Valley Elementary. (As mentioned earlier; when the VVES principal relocated to another school, PIC was really left without that personal connection until Nannette started working with PIC and brought her personal relationships w/ educators at that school to the table.) Those key relationships, coupled with knowing and interacting (at non-school local functions, grocery stores, etc.) with so many of the staff and teachers ultimately were the reasons why PIC still could do this project in spite of the imposing time restrictions from the federally mandated programs.

A further example of the difficulty this challenge presents was observed at a Friends of Gold Butte (advocacy group for preservation of cultural and natural resources in Gold Butte) meeting last summer. The Education Committee Chair had invited Kathy August to speak to the group about ways the group could do educational programs in the local schools. Kathy flatly informed the group that this objective would be almost impossible to fulfill (due to the above Act and other government mandates). Kathy suggested the group spend their time developing educational programs that reach school-age children, but reach them at non-school events such as scouts, church, etc.

Was there something Clark County could have done to assist you?

Clark County is and has always been very helpful to PIC with the implementation of our projects; this project was no exception. The DCP staff spent many hours revising the timelines and schedules for this project; Christina Gibson and Heather Green spend much time supporting PIC, gently reminding and working with PIC to get our reports done in a more timely manner; reviewing our project, replying to questions and offering advice and assistance on problems or issues that come up. They have always found time to meet with PIC on this project and have always helped to remove potential roadblocks instead of erecting more.

What lessons did you learn from undertaking this project?

Several lessons were learned during this project:

1. The restrictions to outside education efforts because of the No Child Left Behind Act can seriously impact whether a project gets done or not.
2. Assembly of the activity guide would have been more efficient if done in a different order.
3. Much more time should have been scheduled for collecting teacher evaluation forms.
4. An incentive should be offered for completion of evaluation forms.
5. Personal relationships with key people in each school allowed this project to be implemented and completed.

What lessons does the success or shortfall of the project have for others attempting similar efforts?

The lessons the success of this project has for others is that educational projects CAN still be done in Clark County schools; it just takes much extra effort and either luck or personally knowing people inside the school district or each school to get a project to successful completion. And even before a project gets to that implementation stage, you must really believe in it as the opposition to outside educational ideas is very intense. There is considerably less resistance, and sometimes no resistance, to educational projects outside the school system. This might be the best route to take if you can find outside-school events and organizations that will allow you to reach your targeted audience. Taking your educational project to other organizations and/or events, does require knowledge of that group/event's goals, objectives, and sometimes political leanings. Your educational project may need to be tweaked a bit so that it doesn't directly conflict with that group/event's goals, etc. Your project doesn't need to support those goals or ideals; it just can't directly conflict with such or your educational project will probably not make much progress.

Educational projects that do make it through the school system and can be implemented should be very sensitive to individual teacher's schedules and work load. A flexible project that allows the

individual teacher's to fit it into their daily schedules as opposed to a project that requires teachers to plan around it, is much more positively received by the teachers.

Teachers resist filling out forms; they already have more forms to fill out than they want, and those forms are mandatory, so forms that are not mandatory are quite difficult to get completed, even though teachers understand the reason behind such forms and know their feedback would be extremely helpful; the knowledge of such does not outweigh the negativity associated with evaluation forms in many cases. Working around this negative association with filling out forms will greatly improve that aspect of an educational project.

Another success of this project that received wide-spread support was the copyright information on the back of each activity. Teachers really appreciated that this info was readily available, that they did not have to search for it, and that they could use the activity without worrying about violating any copyright infringements.

A shortfall of this project was not having Nevada State Standards applied to each activity; teachers still did the activities, but for them to continually use the activity guide—for some teachers—knowing that a particular activity relates to a specific state standard would be the deciding factor in whether that activity gets incorporated into her lesson plans or not. As PIC does a revision of this project and the activity guide, we will work with educators and have state standards identified for each activity.

What would you recommend to others to emulate and/or avoid?

Working with students can be so rewarding! The best part of this project was inside the classrooms, whether it was presenting a Mojave Max lesson, assisting a teacher with one of the activities from the Teacher's Activity Guide, helping with the Calendar Coloring Contest, this is where the 'fun' of the project lies and I would recommend incorporating actual time with the students into any educational project as that is where instant rewards can be found. That interaction with the students is very uplifting, creates positive energy, and is inspiring so direct interaction is definitely recommended.

Additionally, putting in a lot of time on the front end is highly recommended; meeting and visiting with the office manager at each school is critical; most often that person is the key to meeting with the principal, the staff, and getting your project to move forward. The office manager is also very busy and so being organized and efficient when discussing your project with the office manager is also highly recommended.

Work with their schedule; wanting them to adapt to your schedule is not recommended and may be the 'sticking point' your project never gets past.

Additionally, PIC would strongly recommend having your educational project reviewed by educator inside the school system; ask these educators to identify the state standards that apply to your project and to note those portions of your project that do not apply. This correlation between your project and state standards will be a critical step for some. In the rural schools, among the teachers, this did not seem to be an issue at all; they thumbed through the activities and almost instantly and certainly instinctively knew which activities 'fit' with their lessons. However, as PIC visited with non-local educators and administrators, the issue of state standards came up frequently. As time goes by, PIC does believe this will become an even more critical factor.

What impact do you think the project has had to date?

PIC's Desert Conservation Week Pilot Project has had a significant impact to date. The Teacher's Activity Guide, featuring activities that have no copyright infringement issues and can be easily incorporated into a teacher's lesson plans or daily routine is actually IN every elementary school classroom in the northeast part of Clark County. The DVD of DCP's 6 video series focusing on the

DCP's message of 'respect, protect, and enjoy the Mojave Desert' is also in every elementary classroom in northeast Clark County. Both the activity guide and the DVD, when viewed by others, prompts them to want a copy, whether it is a formal educator or a Boy Scout leader--many have requested their own copy. This serves as an informal indicator of the success of the project; people rarely ask for something they do not want.

The other main components, the Calendar Coloring Contest and the Mojave Max Lesson also had a significant impact. Both reinforced the 'respect, protect, and enjoy the desert' message; this message is getting through loud and clear to students and it is because it is a message that is repeated often and is an easy-to-understand message. This project had significant impacts to date as it enhanced that message in several new and innovative ways.

As a pilot project, the individual components of this project were all positively received and if this project was carried forward to more schools, any of the individual components would be accepted and used. The name needs to be changed; when first introduced as a Desert Conservation Week project, some are instantly resistant because of the 'week' concept. This pilot project being carried forward would be more easily received if the title and presentation strongly suggested a teacher's individual control over each of the components; that teacher could utilize any component when it best works for them. For example, the DVD might not be viewed for months, but one week the teacher might have a substitute there for several days; she might have the substitute show the video then. The project's individual components have had a significant impact; spread out over time, each component reinforcing the 'respect, protect, and enjoy the desert' message, this project has provided teachers with a variety of ways to teach and actively involve the students in incorporating that message into their daily lives.

Is there additional research or efforts that would complement or add to your project that could be conducted?

As mentioned above, reviewing each activity in the Teacher's Activity Guide for compliance with Nevada State Standards is a great idea and would make the guide even better. The state standards that each activity fulfilled could be listed on the back of the activity in addition to the copyright information.

PIC asked several educators (local teachers currently teaching) to review the activity book prior to assembly and no one recommended pulling any of the activities from the guide; however, if and when PIC does an upgraded version of the Teacher's Activity Guide, a formal statement from each of the reviewers would be a positive addition to the guide and would further substantiate the validity of the guide and its usefulness to teachers and the Clark County School District. Additionally, the school district (PIC has learned) has a specific department that can also review and approve the activity guide. This, too, would be a positive addition to the guide and reinforce the guide's appropriateness and usefulness in the education system.

FORMAL REPORT:

Executive Summary:

Featured Project and Type:

DEVELOPMENT OF CONSERVATION WEEK AS EDUCATIONAL PILOT PROGRAM

Purchase Order # 4500025879-003

2003-PIC-348-P

Type of project: Education

Species Addressed:

Desert Tortoise and general conservation of all species and habitat in the Mojave Desert/Clark County

Summary Project Description:

Approved by the Monitoring and Implementation Committee of the Desert Conservation Program, approved by the US Fish and Wildlife Service, and recommended for funding by an independent analysis of the entire education program, PIC's Desert Conservation Week project was submitted to reinforce and enhance the message of 'respect, protect, and enjoy the desert' to the rural elementary schools of northeast Clark County, i.e., the elementary schools of Moapa Valley and Virgin Valley. Though the methods of delivery have changed from proposal submittal in 2002 to purchase order issuance in 2006, the goals of this project have remained the same, not only to bring the 'respect, protect, and enjoy the desert' message to the rural schools, but to *personalize* that message so that students in northeast Clark County would internalize that message and subsequently *want* to 'respect, protect, and enjoy MY desert'.

PIC proposed to deliver this message by a series of components that would work together and reinforce that message, but that each component would be a unique educational experience unto itself. As time passed on, those components were adjusted to fit into the current reality of the elementary schools; the No Child Left Behind Act seriously impacts the amount of free time teachers have to devote to outside educational efforts. Thus, the following educational elements were enacted:

1. Teacher's Activity Guide containing 127 pages with 83 unique activities
2. DVD with the DCP's 6 videos
3. Calendar Coloring Contest
4. Mojave Max lessons

The Teacher's Activity Guide was produced with copyright information listed on the backside of each activity, noting that each activity could be re-produced and used in a non-commercial, educational environment. These guides also contained reference materials for various organizations and websites that contained additional environmental educational materials as well as a contact sheet of local environmental educators for quick reference for the teachers. This activity guide was placed in each classroom in each rural elementary school in northeast Clark County as well as in each school's library and office, plus additional copies for substitute teachers or replacement of lost copies.

In conjunction with the Teacher's Activity Guide, PIC made 2 boxes containing supplies not commonly found in the classroom that some of the activities called for. Such supplies were sand, ice trays, clay, twigs, leaves, rocks from the desert, colored pipe cleaners, etc. These supply boxes are available to teachers if they want to do an activity and don't have the necessary supplies. One box was made for each valley and PIC will deliver that box to any teacher who wants to use it.

PIC considered the DCP's 6-video series such a valuable resource that, although not required, PIC paid for over 200 copies of the video to be produced. Each activity guide also contained a copy of this DVD so that each rural classroom in Moapa Valley and Virgin Valley has a copy of this DVD.

PIC implemented a Calendar Coloring Contest in each school wherein students were asked to draw a picture and write a few sentences on the theme of "How I respect, protect, and enjoy MY

desert.” PIC had community members serve as judges and select the winners of each school for this calendar. PIC then made specific calendars for each school’s classroom, library, office, and other joint-use rooms; the calendars showcase the winners of this contest and reflect the students’ feelings towards their desert. Additionally, each winner took a calendar home which helps to spread this message from the schools into the homes.

The final component was a concentrated effort to teach the popular Mojave Max lessons in the rural schools. This element does not have a deadline as teaching this lesson continues on into the new year with several classes scheduled for January already. Incidentally, PIC will continue to assist teachers with activities in the guide, bring the supply box, assist with the outdoor activities, or do whatever a teacher may want; this active participation by PIC does not end with the completion of this report, but will continue throughout the entire school year.

Project Status/Accomplishments:

This project accomplished the following:

1. Delivered this project and its components to over 105 teachers and over 2,200 students in the 4 rural elementary schools of northeast Clark County, Virgin Valley, Bunkerville, Logandale, and Moapa.
2. Compiled, produced, and distributed 200 of the 127 page Teacher’s Activity Guide to each classroom, library, and office in each school.
3. Copied and distributed over 200 DVDs of the DCP’s 6-video series to each classroom, library, and office in each school.
4. Produced 2 supply boxes to supplement the activities in the guide, one supply box for each valley.
5. Implemented the Calendar Coloring Contest, selected winners, and produced 4 unique calendars featuring the winners, each school has their own unique calendar; calendars were placed in each classroom, library, office, and joint-use rooms.
6. Delivered Mojave Max lessons to almost 300 students, with other presentations scheduled after the first of the year.
7. Promoted this project at fall events and meetings.
8. Over 160 hours were spent in compiling the activity book, over 320 hours were spent in copying and assembling the activity book and the calendars, over 120 hours were spent in implementing and administering this project, 80 hours were spent in collecting teacher evaluation forms and summarizing the comments; over 40 hours were spent on various reports and project paperwork; total hours spent on this project are over 700 hours.
9. Given away extra copies of the Teacher’s Activity Guide and the DVD to non-school organizations who, through word-of-mouth, have heard of this project.

The status of this project is that it is officially complete, although Mojave Max classes and assistance with activities from the activity guide will continue throughout the school year.

Partners:

Clark County MSHCP or DCP, Virgin Valley (Mesquite) Elementary School, J. Bowler (Bunkerville) Elementary School, G. Bowler (Logandale) Elementary School, Perkins (Moapa) Elementary School, Mojave Max Project, various educators and teachers who provided advice, expertise, oversight, and review of this project.

Project Contact:

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Funding:

This project was funded through the Desert Conservation Program with Southern Nevada Public Lands Management Act monies from the sale of public, federal land in Clark County, Nevada. This project was funded for \$20,500.00.

Completion Date or Status:

This project is complete as of November 30, 2007.

Documents/Information Produced:

Teacher's Activity Guide and supporting documents; Calendars for each rural elementary school; copies of the DVD (DCP's 6-video educational series); 2 supply boxes to supplement activities in the activity guide; article in local paper (attached); and PR materials at fall events and meetings.

Two Project Photos:



Working on the Calendar Coloring Contest portion of the project.



Virgin Valley Elementary School student participating in Mojave Max lesson.

Introduction:

Description of the Project:

This project was designed to focus on the rural schools of northeast Clark County and to implement a Desert Conservation Week pilot project which continually reinforces the message of 'respect, protect, and enjoy our desert' through introducing each teacher and class to a series of educational components. Each educational element is unique and approaches learning from a different perspective, but each element centers around the basic message of 'respect, protect, and enjoy our desert'.

The DVD component is a visual experience made up of 6 different videos which take various topics and shapes them around the 'respect, protect, and enjoy our desert' main theme.

The Mojave Max component is an informal presentation to the class utilizing many hands-on activities that help students not only learn about the desert and the desert tortoise, but also help students learn what they can do to help the tortoise and the Mojave Desert ecosystem.

The third component is a coloring and writing contest that helps students correlate their words and their artwork to reflect their personal meaning of 'How I respect, protect, and enjoy MY desert'.

The final element of this educational project is the Teacher's Activity Guide; a book comprised of 127 pages, featuring 83 different activities. These activities all focus on the main theme of 'respect, protect, and enjoy the desert', but each activity also focuses on a different learning style. Some activities are math related, some science, some language arts, some are history related, some are outdoor activities involving teamwork, some are science projects, some focus on using the creative process, some focus on understanding the relationships between 2 sets of items. Some activities are loud, physical, or involve group work, some involve working by themselves, the list goes on and on. The Teacher's Activity Guide seeks to provide many different activities and many different learning styles so that all students can be reached, to one degree or the other. The guide provides multiple opportunities to reinforce the 'respect, protect, and enjoy the desert' message.

These above mentioned educational components were introduced into each of the 4 elementary schools in northeast Clark County; each classroom now has all the materials needed to participate in learning how to 'respect, protect, and enjoy the desert'.

Additionally, this project contained an evaluation component which focused on collecting evaluation forms from the various participating teachers and summarizing and compiling this evaluation data.

Background and Need for the Project:

The background and need for this project are identified in the Clark County Multiple Species Habitat Conservation Program as the MSHCP is required to provide Public Information and Education as a conservation action. Not only is the message of this project (respect, protect, and enjoy our desert) one of the three objectives spelled out in the MSHCP, but this project actually targets 2 of the 3 target audiences identified in the above mentioned document. One of the target audiences' is 'Children' and one is 'Special Interest Groups' and rural residents fall under the 'special interest' target audience.

Management Actions Addressed (as identified in the MSHCP):

This project is specifically identified under section 2.8.3.4 'Public Information and Education' of the MSHCP; as part of the initial goals of the long-term DCP, Clark County has placed a high priority on public information and education. In addition to being approved by the Implementation and Monitoring Committee of the MSHCP, this project also underwent independent analysis and was recommended for approval and funding through that independent analysis.

Goals and Objectives of the Project:

The goals of this project are:

1. To develop a Desert Conservation Week Program for the participating elementary schools; to devote a week to learning about the desert we live in and learning how to best respect, protect, and enjoy our desert,
2. To test pilot program in the rural communities of Moapa Valley and Virgin Valley,
3. To evaluate the Desert Conservation Week Program and make recommendations for future implementation of said program.

Methods and Materials:

The methods used in this project were very hands-on and interactive with each of the 4 rural schools; direct and personal contact was maintained with key people at each school through the entire length of this project, from inception in 2002 to implementation in 2007. These low-tech methods of building personal relationships and providing hands-on activities are very effective in the rural communities; these methods parallel the lifestyle of rural communities. Teachers, staff, and students are very receptive to this style as it is what they are accustomed to and what they are comfortable with.

The materials used in this project have been enumerated several times in the above discussions; they include a Teacher's Activity Guide, 2 boxes of supplemental supplies for the activity guide, a calendar coloring contest, a DVD with 6 videos, and presentations of Mojave Max which involves many hands-on activities for the students to participate in.

Results and Evidence of Results:

Results of this project are seen in each elementary school classroom in northeast Clark County; each classroom, library, and office has a Teacher's Activity Guide with 127 pages of diverse activities focused on 'respect, protect, and enjoy the desert'. Additionally, each classroom, library, and office has a DVD with the DCP's 6-video series, again focusing on the message of 'respect, protect, and enjoy the desert'. Results of this project are also found in the Calendars hanging in each classroom, office, and library; the calendars were made from contests wherein elementary students drew and wrote their personal meaning of "How I can respect, protect, and enjoy MY desert". And results are also seen in the number of students who have received the Mojave Max presentation/lesson this year; to date over 300 students have been taught the Mojave Max lesson with more lessons scheduled in January.

Evidence of the results of this project, that students understand what 'respect, protect, and enjoy the desert' means can be found in the calendar coloring contest's entries. Entry after entry demonstrates that students understand the meaning of that message and are incorporating that meaning into their daily lives, they are internalizing the message; the calendar pages are evidence of that understanding and internalization that is necessary to affect behavior change. Calendar contest statements like 'I like the desert because I go camping at Red Rock. I stay on the tracks.' (2nd grader) or 'I can protect the desert by...cleaning up trash and not kicking the plants and cactus and follow tracks if you are riding on a four wheeler or a rhino (type of ATV) then you won't hit a desert tortoise.' (2nd grader). And again, 'I respect my desert by picking up trash during hiking trips.' (3rd grader) or 'I respect my desert by leaving other animals alone! I protect my desert by picking up trash! I enjoy my desert by playing with my friends.' (5th grader) More, 'I can respect the desert by not keeping trash on it. I can protect it by picking up trash. I can enjoy it because I can have picnics there.' (5th grader) And, 'How I respect, protect, and enjoy my desert is to help animals like rattlesnakes, scorpions, and other animals clean up their habitat which is the sandy, hot and nice desert.' (3rd grader).

These statements, written by students who live next to the desert and play in the desert on a regular basis demonstrate that they understand what 'respect, protect, and enjoy the desert' means; furthermore, they have taken this message and made it their own; they have internalized the message and reshaped it into their world, their world of picnics and camping, of riding four-wheelers and playing with their friends. These calendar pages are evidence of results of this educational project.

Evaluation/Discussion of Results:

Going through the entries to the calendar contest was pure joy; it was so fun to read (and at times try to decipher what miss-spelled words or wacky sentences meant) what students had written and look at the correlating pictures they drew and to see that they truly do care about the desert, they do understand that picking up tortoises and taking them home is wrong, they most definitely understand how wrong it is to litter and trash the desert. And they understand so much more. One of my favorite calendar entries was from a young boy who said, 'I know it is wrong to chase animals in the desert, but it is fun. But it is wrong, I know it'. And kids do like to chase after lizards and such, however to have the little guy know that's not the best thing for the animals—to feel his moments of conflict—was a great moment for me. Another favorite entry stated, 'sometimes I go out and pick up red milk lids, blue milk lids, orange Gatorade lids. Also Lins grocery bags. Sometimes I get pricked by a prickly pear cactie.' (Lin's is the local grocery store and there are more than enough plastic 'Lin's' bags out in the desert) I just got a kick out of his detailed description of the trash he finds. And another entry was from a little girl; it wasn't her words, but her picture that was so delightful. Her hair is curled with a bow in it; she has on a dress, and is carrying a color-coordinated purse and smiling cause 'she loves her desert so much' and she is dressed to the T out in her desert!

Going through the calendar coloring entries at the end of this project was not only great fun, but very informative and uplifting. Kids do hear the messages; sometimes they interpret the messages differently than I expected, but the very fact that they heard the message, mulled it over, applied it to their life, and then made their cute statements in the contest was an informal, yet satisfying affirmation that this project did accomplish something. Hearing students thank you for the Mojave Max lesson or having them tell you that an activity from the activity guide was 'lots of fun' is additional evidence that this project achieved the goal of having rural students take the message of 'respect, protect, and enjoy the desert' and internalize it and MAKE it their own message---obviously not every student 'got it' but certainly many did and those that didn't, well there is still time for it to sink in, especially as PIC informally continues this project throughout the rest of this school year.

Conclusion:

Education is a difficult thing to quantify; it was much easier to state with confidence what PIC's fencing project accomplished; x amount of fencing was installed—very easy to measure, very easy to quantify, very easy to list as an accomplishment. Education is different. Not everyone pays attention, not everyone cares, not everyone has a good night's sleep and a nourishing breakfast before school. There are many variables that go into a student's day, into whether or not he hears the lesson, grasps the concept, thinks about it, applies it to his world. And the teacher variables, is she having an 'off' day? Is she focusing on this lesson or her sick child, or the math lesson in the afternoon, or lunch because she's hungry? When you think about it, with all the variables that can and do happen each day, it is a marvel that so many students do get the message. And repeating the message and reminding them, reinforcing that message throughout the year, and next year, and next---it really does sink in; that message becomes part of their life, they learn it, share it, apply it, and the magical moment

happens when their behavior changes because of what they learned. It does happen. I see it in these rural students; I see it in me; evidence of education working, of messages being understood—that is very difficult to measure, but it undeniably does happen. One child at a time—in essence, our own educational ‘no child left behind’ project.

Recommendations:

Just because education isn’t easy; just because educational projects are difficult to quantify and measure, just because there is inherent opposition to anyone introducing a ‘new’ educational project or concept, does not, for one minute, justify not doing anything. So PIC’s first recommendation is, if you have a great educational idea, pursue it, develop it, and don’t let anything stop you. Believe in your project and do not give up.

Secondly, as time goes by, circumstances change. Therefore, you must be flexible and willing to modify your project to accommodate the changes that will occur. Seek support, advice, encouragement, and help from anyone and develop partnerships; the more people helping to move your project forward, the better.

A third recommendation specifically for projects within the school system is to put a lot of time in on the front end of your project getting to personally know key people in the schools you want to work with. Focus on the office manager as she is the person that basically controls access to the principal, the staff, and the rest of the school. The office manager is also very busy, so being organized and appreciative of her schedule will certainly help.

Along those same lines, it is critical to work with the school’s schedule and timeline; it will do no good to expect them to conform to your schedule; that will get you and your project nowhere.

And finally, especially for projects within the school system, a review of your project and written letter of approval from someone inside the school system is highly recommended. Since PIC was working with the rural schools in northeast Clark County, this wasn’t much of an issue; however, elsewhere in the school district it would be almost necessary before a project could advance.

One last recommendation is to consider doing your educational projects outside of the school system; you can still direct your project to the relevant age group, etc., but by working with non-school-district organizations like scouts or church groups or after school recreation programs, you can get your project implemented much more quickly and have much less ‘red tape’ to deal with.

Literature Cited:

N/A

Attachment:

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Friday, November 30, 2007

Desert Valley Times

VVES students learn importance of desert habitat

First grade VVES student Cheyanne Goris, pictured with Elise McAllister of Partners In Conservation, dresses up as a desert tortoise at a "Mojave Max" assembly to help teach students about the importance of protecting and respecting our desert habitat.

Mojave Max is a live desert tortoise that resides in a habitat at the Red Rock visitor's center.

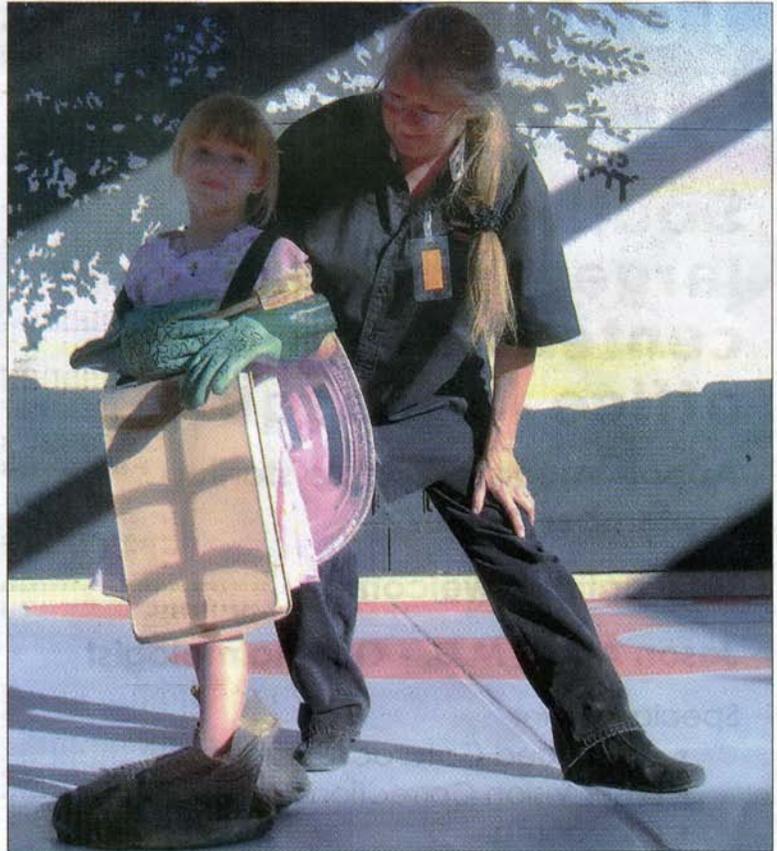
Each year Clark county School District students from kindergarten through the 12th grade learn about Mojave Max in hopes of making the best educated guess on when the tortoise will emerge from his winter "brumation."

Each year the grand prize winning student will receive a new personal game system

and a Golden Eagle National Park Pass. The grand prize winning student and his or her entire class (up to 30 students plus up to two teachers) will receive a field trip to Mojave Max's habitat at Red Rock National Conservation Area, a class pizza party, a Mojave Max T-shirt, and a Mojave Max Olympic style medal. The winning teacher will receive a new personal computer and a Golden Eagle National Park Pass.

For more information on the contest, visit www.mojavemax.com.

Educators interested in scheduling a Mojave Max assembly for students or seeking a Desert Conservation Week Teacher Activity Book can contact Elise McAllister at 702-219-2033 or Nannette Nelson at 435-669-2138.



(PIC did not write this article; we submitted the photo and some text about our Desert Conservation Week Pilot Project and this is what was printed.)