

This presentation premiered at WaterSmart Innovations

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Using Community Based Social Marketing in Water Conservation School Programs



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Water Watchers Program

- Two year grant from the Bureau of Reclamation and the city of Glendale (Grant # 06FG320680)
- 4th, 5th, and 6th grade Glendale teachers
- New program modeled after Experiential EE and Project W.E.T. (Water Education for Teachers)



Program Development

Community-Based Social Marketing

1. Selecting a behavior
2. Researching the barriers
3. Researching the benefits and norms
4. Designing a program using behavior changing tools
5. Pilot-testing the program
6. Implementing and evaluating the program

Selecting a behavior

Goal:

Integrate water education in Glendale classrooms

Objectives:

1. 20 teachers will teach at least three water education lessons to approximately 600 students.
2. 80% of students will complete pre- and post-tests.
3. 60% of students will complete take-home water audits.


Researching barriers & benefits

Asked teachers in two focus group sessions

22 teachers participated from:

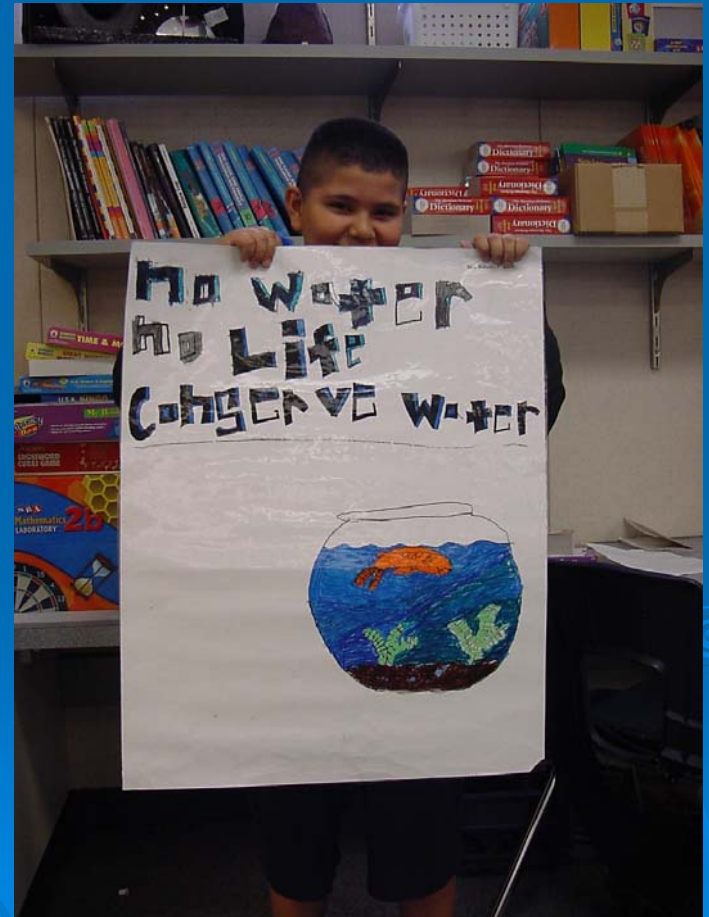
- 5 Glendale area school districts
- Private and charter schools
- Retired teacher

Barriers in water education?

- Limited time to research, develop, and set-up lessons/activities
 - Limited time to attend teacher trainings
 - Minimal resources and funding
 - Not a specific Arizona Academic Standard
 - Difficulty in facilitating activities for large number of students
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- The background of the slide features a blue gradient with several faint, concentric circular ripples that resemble water droplets or raindrops, scattered across the lower half of the page.

Benefits of water education?

- Develops character
- Students influence parents at home
- Train the future leaders so they know that water conservation is important
- Students learn they make a difference and are part of the solution



Behavior changing tools

1. Commitment – the state of being bound to a course or action
2. Prompts – reminders or cues
3. Norms – a standard model or pattern regarded as typical
4. Communication
5. Incentives



Pilot testing the program

Spring 2007 Semester:

Four teachers participated

- Pre- and Post-tests:
 - Students reported a 21% reduction in water wasting behaviors
- Home Water Audits:
 - 68% response rate

Key Items Learned:

- Develop a Spanish-language water audit
- Increase communication with teachers

Implementing the program

1. Free resource materials:
 - a. Lesson plan guide
 - b. Water education kit
 - c. Student workbooks
2. Teacher training
3. Guest speaker presentations
4. Support with service-learning projects
5. Take-home water audit
6. Retrofit incentives for families



Evaluating the Program

Objectives:

- 22 Glendale area teachers participated
- 830 Students involved

Pre- and Post-tests – 83% response rate

- 4th Grade Students
 - 22% decrease in water wasting behaviors
- 5th/6th Grade Students
 - 15% increase in awareness of water wasting behaviors at home, school, and in the community

Home Water Audits – 60% response rate*

*Note: Three classrooms with low response, less than 30%. Average without these classrooms was 67%.

Evaluating the Program

Teacher Surveys:

- Average number of lessons taught 3.4 out of 6
- Rated the program highly in the following areas:
 - Educationally sound
 - Well-organized and easy to follow
 - Age-appropriate
 - Correlated to the Arizona Academic Standards
 - Customer service

Evaluating the Program

Teacher Survey Comment:

“Overall I was very pleased with the projects and information this program offers. It ties in so well with what I am doing with my students in science and also in social studies. I felt your visits were well geared to my children’s level and kept their interest. The information shared was beneficial to them. They loved Wayne Drop.”

Principal Comment:

“Thank you so much...this program and your great staff have been a positive asset to our school. Many thanks for a job well done! The kids have learned much and have enjoyed it, too.”

Evaluating the Program



How did the project benefit the community?

“...show how much one person could do and how us people care about this community.”

“More people are aware of the (water wasting) problem, so more people will help.”

Key Items Learned

- Integrate lessons into existing curriculum
- Lessons need to be grade specific
- Create simpler lessons
- Recognize and address teachers' varying comfort levels
- Teacher trainings more effective with a small (5 or less) group of teachers
- Keep teacher trainings as short as possible
- Develop age-appropriate pre- and post-tests
- Be flexible with teachers' schedules and needs

Resources

- Community-Based Social Marketing
www.cbism.com/
- Experiential EE
www.experientialee.com/
- Character Counts!
www.charactercounts.org/
- Project W.E.T.
www.projectwet.org
- Arizona Project W.E.T.
www.cals.arizona.edu/arizonawet/
- Service-Learning
www.csl.iupui.edu/onp/k-12/k12_sl_handbook.html

Quotes that Make it All Worthwhile

“I got to be a scientist for the first time in my life.”

“I’m trying to keep my showers under five minutes. So far, I haven’t been doing so good, but I’m trying.”

“At my house, I am saving a lot of water. My mom was proud of me. I was happy.”

“I learned that we could work together when saving water.”

“Rain, rain, in the day
We will never have to pay
On a rainy day.”

Questions?

