The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization name:
Give Every Child A Chance

Organization URL:
www.gecac.net

Project Name:
Technology Outreach Program

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

The Technology Outreach Program (TOP) will offer computer instruction to children whom might otherwise not have access to computer technology. Children from underserved communities have limited, if any, access to resources needed to develop vital technological skills. They face even greater odds when it comes time to compete with their more affluent peers. Consequently, these children become discouraged in their early school years and steadily fall farther behind in school, as they grow older. The TOP Program's success is measured by the improvement rates of each of the attending student. Every school year a TOP Curriculum is created to teach lessons on computer safety, Internet safety, typing, and web page designs. With this curriculum a pre- and post-test is develop and is used to measure and record the improvement rates of each student, as well as the total improvement rates of each school. TOP is a mobile technology program that will travel from school to school in the Give Every Child A Chance (GECAC) service areas, which include Manteca, Banta, Ripon, and Escalon School Districts. TOP will be at an assigned school sites for two weeks, each week with a specific grade. Each year the TOP Program teaches at a different grade level. During the 2010-2011 school year, we served 4th and 5th graders; in the 2011-2012 school year, we are serving 3rd and 4th graders. By rotating the classes between different grade levels, we assure the same students are not repeating the program, and creating new curriculum. The goal for the Technology Outreach Program (TOP) is to integrate technology into the student's life, rather than allow it to remain an unattainable goal. This will assure that all students use technology to help meet their interests and needs, thus preparing for their futures.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

Our vision for TOP was to make a mobile technology program that would travel from school to school in the GECAC service areas, which include the Manteca, Banta, Ripon and Escalon School Districts. With this vision, we at GECAC and with the support of many supporters made this vision come true. GECAC took a regular school bus from the auction yard and changed it into a computer lab on wheels. We gutted out the seats and added tables, chairs, and laptops for students of all ages. The most exciting component of the TOP Bus is the solar panels, which are installed on top of the bus. In order to be successful with a computer lab on wheels, we had to find an innovative and economical means of powering the laptops. We determined that installing four solar panels on top, to utilize sunlight as a power source, would be the most economical way to go. The solar panels power not only the laptops, but everything else on the bus including the lights, heater, air conditioner, and the alarm. With the sunlight during the day, the solar panels absorb power, storing it inside the inverter. The inverter then sends power to the electrical sockets on the wall of the bus for our use. One of the challenges we had to overcome with the solar panels was cloudy/rainy days. Without sunlight to charge the solar panels, the bus would have no power. For those few times, we installed a backup generator. Rarely does the generator turn on, because the solar panels always collect enough sunlight daily to keep the TOP Bus running.

Please list the specific humanitarian benefits the project has yielded so far.

Access to technology and proper use of the Internet: Our program gives students the opportunities to learn about technology that they are around, while giving them experience and guidance on how to use the Internet correctly. Ability to surf the Internet in a safe environment: Many students today don't know how to surf the Internet correctly and safely. Students like to surf the Internet for music, videos, and games, which is fine, but some click on advertisements, links, and downloads that might introduce them to a virus or an inappropriate website for their age. Access to information about and hands-on experience with careers in technology: Within the TOP program students have hands-on experience with laptops for 2 hours a day for a week. Students are introduced to programs like Mavis Beacon Typing, Microsoft Office, Study Island and PrintMaster. With these computer programs the students will get experience that will benefit them in their careers when they become adults. Benefits to the community: The TOP Bus has been serving the Southside Church of Manteca once a year at their annually Family Unity Night in August and introducing neighboring children to the technology world. School Districts: TOP brings an innovative and exciting learning tool to the schools, offering computer classes to those students who might not have access to technology at home. Best Buy: The TOP Bus has been serving at Best Buy once a year in the summer time to introduce children and elders to the technology world. Children will learn with hands-on experience about cameras and how to use them with computers. Elderly citizens will learn with hands-on experience about computers, Internet usage, cameras and cell phones.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

Our goal for the Technology Outreach Program (TOP) is to integrate technology into the student's life. Here is a perfect example how the TOP Bus/Program benefited a student's life. A 4th-grade girl from one of our elementary schools filled out an application to be in the TOP Program. In August of 2010, she and 9 other students were chosen from their school to participate. This young lady was a quiet girl that had little knowledge of computers or the Internet. On the first day

of class, students had to complete a pre-test to see what they knew about computers and the Internet. Questions on the pre-test/post-test where basic computer/Internet questions like: What's an icon? What does the refresh button look like, and what letters are included in the home row keys? At the end of the pre-test she scored a 3 out of 19, or 16%. She was the lowest scoring student in the class. During her short time in the class she learned many things. She enjoyed the class and the new experience of using a laptop. On the last day of program, she took the post-test to see what she learned. She scored a 17 out of 19, or 89%, on that test. She improved 73%, moving her scores and knowledge from the bottom of the class to the top, within a week. Thus far she is the most improved student in the TOP Program.