

TechSETS Case Study

Borrego Springs Unified School District Student Technologists

By Debby Pearson, TechSETS Project Evaluator ~ April 2006

Location/Educational Agencies: Borrego Springs Unified School District (BSUSD)

Contact: Chuck King, Director of Technology ~ cking@bsusd.k12.ca.us

Primary funding sources: GenTECH* student program funded by District

Program Improvement Schools – Yes

Rural & Underserved: Yes

District Demographic Data:	# of schools	Student Enrollment	# of students per computer	# of paid tech support staff	2005 API
Borrego Springs Unified	4	485	2.6	1.5	691

Borrego Springs Unified School District (BSUSD) has established a successful Computer Intern Program that incorporates the use of MyTechDesk (TechSETS' free web-based work order system) and the Generation TECH* curriculum (a student tech support program developed by Generation YES, an exemplary-rated federal Technology Challenge Innovation Grant). The computer intern program is available to Borrego Springs High School students, and is lead by BSUSD Director of Technology, Chuck King.

Primary purpose: MyTechDesk has been effectively used by the Technology Dept. at Borrego Springs Unified to manage and track the technical service needs of the district for the past several years. In addition, MyTechDesk has been incorporated and become an integral part of the student Computer Intern Program. This program is used to support the technical assistance needs of the districts. This case study focuses on MyTechDesk use in the Intern Program.

Demographics: Borrego Springs Unified School District is a small, rural district in northeast San Diego County. The district is comprised of one elementary school, one middle school, one high school and one continuation school. The total student enrollment is approximately 485. There are approximately 187 student computers available in the district, supported by 1.5 paid technology support staff. The district includes Program Improvement schools and has an API score of 691. Approximately 75% of students are eligible for Free and Reduced Priced Lunch.

Description: The MyTechDesk ticket system is an integral part of the BSUSD Computer Intern Program. GenTECH students are assigned work orders in response to staff and faculty request for support through MyTechDesk. When the technology staff receives a request via email, the information is entered into the ticket system and the priority level set according to the critical need of the request. An automatic email is generated through the system to the student intern assigned to the work order. Students then retrieve the support request when they check into their email during class period. A paper copy is printed and taken with the student to the location where the problem was reported, for use in documenting the resolution, time spent in remediation, and any additional issues that may not have been reported. In addition, students can use the ticket to record items they encounter that may require attention from the IT department.

At Borrego Springs, a timeframe is established for the rating levels in MyTechDesk: low, medium, high and critical. Critical issues are responded to immediately or as soon as possible and, if not resolved, a reasonable work around is sought within two hours or by the end of the business day. For this reason, students generally do not respond to critical support issues unless they are accompanied by tech staff members.

Students “shadow” technology support staff on these occasions and the visit to the user is utilized as a training session for interns. Likewise, senior students in the program are taught to mentor other interns by using the “shadow” method. This is yet another way that MyTechDesk is used in the Intern program to document and record the actions taken to resolve system issues. Using the ticket to record resolutions helps the student learn to track and document his/her progress. The documentation process is repeated when the student journals in his or her GenTECH web log, or blog.

It is possible for a student to accumulate an impressive log of trouble ticket resolutions over the course of the Intern program. This paper or electronic trail is useful in validating the student’s on-the-job experience for future employers. Documentation is also important for tracking the computer life cycle in the districts labs, classrooms and offices. Students can record the serial number of equipments and, by cross-referencing ticket number and serial number in the IT Department Computer Inventory Database, it is possible to create a cost/benefit analysis of a computer’s life cycle. GenTECH students at BSUSD are currently working on this database.

One of the goals of the BSUSD Intern Program is to create a knowledge base for internal technology support staff. Information residing in the ticket systems can be used as a troubleshooting catalog for students to access when responding to trouble calls. This has saved time and leveraged experience by sharing documentation through the MyTechDesk system.

In general, without the MyTechDesk work order program, students’ ability to respond to and track trouble calls in a real world job environment would be very limited. The TechSETS tools and web site have been a great benefit and continue to meet the needs of Borrego Springs technology support and the Computer Intern Program.

Resources/services needed to implement: MyTechDesk account and student intern program

Known impact on teaching, learning, instructional management, and delivery of support services:

- ✓ A total of 12 students have participated in the BSUSD Intern Program since 2003. Of the 12, 50% have gone on to 4-year colleges (4 students) or have been accepted for Fall 2006 (2 students). All have pursued an emphasis in technology. At least one other student has joined the military using his technology skills in the field of communications.
- ✓ A student in the first graduating class of interns has returned to Borrego Springs and joined the staff as an assistant to the Technology Director. He is a strong advocate of the program.
- ✓ It reduces the cost of technical assistance for the district and the amount of crisis-level tech support necessary by having student interns perform preventative maintenance operations.
- ✓ MyTechDesk has made it possible to track the success of the intern program through the tracking of work orders. Work orders in general have also been reduced. Statistics available through MyTechDesk reveal a 31% decrease in the number of work orders submitted over a three-year period (as of May 2006 figures).

•Work orders, 2003-2004 – 263	•Work orders, 2004-2005 – 261	•Work orders, 2005-2006 – 179
-------------------------------	-------------------------------	-------------------------------

- ✓ The program has provided work experience and an organizational structure for students who plan to pursue a career in the technology field.

Other Benefits:

- ✓ MyTechDesk provides a structure through which the technology teacher and students can keep track of projects and work accomplished.

- ✓ MyTechDesk provides students with a powerful example of the value of organizing, coordinating and structuring services to meet the organization's technology needs.
- ✓ MyTechDesk has eased the tracking burden for the technology teacher and provided a monitoring tool to follow student progress.
- ✓ MyTechDesk integrates language arts skills in the project-based learning; students respond to a problem identified through a MyTechDesk work order, fix the problem, and write a response in MyTechDesk explaining the problem's resolution.
- ✓ Students feel empowered when they are handed a work order. They recognize the level of responsibility with which they have been entrusted and take full ownership of that responsibility.

Lessons Learned

- ✓ Not all students go on to college or enter a technical field, yet the Intern program and the organization skills learned through MyTechDesk assist students in any endeavor.
- ✓ MyTechDesk has been a good way to identify staff that made frequent requests for support. A determination could then be made about the cause: a lack of user knowledge, or a computer hardware/software issue? This helped to identify staff members who needed additional support and training, as well as identifying hardware/software that was in need of replacement.
- ✓ Once a particular issue was identified as a repeated need, students were able to create instructional documentation as tutorials for users, as a proactive response to common issues.
- ✓ TechSETS has much more to offer the intern program. Other segments of TechSETS will be incorporated into the future program. In 2007, a follow-up case study will look at the implementation of other resources.

Is this effective practice recommended for sharing? Yes X

Additional information

MyTechDesk was developed in 2001 by the Learning Technologies department of the Imperial County Office of Education, to help manage ICOE's own Information Technology (IT) support operation. Its use was soon expanded to include California schools, through collaboration with the California Department of Education's TechSETS project. The quality and value of this initial product prompted the development and support for a fully developed, feature-rich version. Beginning January 1, 2005, MyTechDesk Standard became available to California K-12 schools and schools districts at no cost. MyTechDesk is available by subscription to other educational entities, as well as to public and private organizations. Please visit the TechSETS web site for more information: <http://www.techsets.org/mytechdesk/>.

Generation YES/Generation TECH: For more information, please visit <http://www.genyes.com>.

**Please note that the GenTECH program is being merged with the GenYES program during the 2008-09 school year.*