Cabrillo's NETLAB+ Data Center Expands its Reach

In fewer than three short years, the NETLAB+ Data Center has provided over 6000 Information Technology students 24/7 access to real networking equipment used in a systems administration or cybersecurity career. And according to Gerlinde Brady, Dean of CTE and Workforce Development at Cabrillo College, the NETLAB+ data center's creation has opened up the possibility of even more community partnerships than once considered.

The $1 million data center based at Cabrillo gives hands-on training to students at 25 Bay Area community colleges through online equipment and curriculum. These students learn to configure and manage the latest computer operating systems, networking equipment, and application software by participating in over 500 labs. Curriculum is developed by companies such as Cisco, Palo Alto Networks, Red Hat, EMC, and VMware. As the field rapidly evolves, more labs are constantly being added.

Brady states, "NETLAB+ is a great resource to learn and develop skills, as well as work toward certifications, for people who can't get to campus easily." The peak usage time at NETLAB+ is 2:00 to 4:00 in the morning, indicating popularity with students with day jobs who want to either move into a new career or upgrade their skills for their current job.

Now NETLAB+ is available for high school students. High school curriculum has mostly focused on coding and computer science. There is a growing interest in IT at the high school level. NETLAB+ staff want to tap into this interest to raise awareness of cybersecurity issues and the need to have more people trained. Brady says that security is the "hot new item" in their curriculum. By partnering with NETLAB+, the high schools don't need to spend money to build and manage a data center.

One way NETLAB+ is reaching high school students is by partnering with DigitalNEST in Watsonville. DigitalNest will provide support for high school students attending Cabrillo College's IT course at its Watsonville campus, helping NETLAB+'s goal of reaching Pajaro Valley United School District high school students.

Companies find value in the NETLAB+ program as well. Holly Miller, Director of Technical Services at the Santa Cruz Beach Boardwalk claims, "When I see those applicants who have the foundation of technical knowledge and who have been through a program like this, I put those resumes at the top of the stack because I know they are going to have what it takes to support all of the technology we have at the Boardwalk."

Former student and current Got.Net employee John Bejarana says, "I worked in small time retail jobs before I started this program. Going through the networking, computer hardware and software setups, Linux, and Windows Server helped me round out my ability as a technician. These days I work a lot in Linux/Unix and am working on networking maps of our systems and troubleshooting items over the phone."

Prior to the creation of the NETLAB+ Data Center, each of the 25 community colleges had their own smaller data center. They were managed by faculty in addition to their regular workload because it was important for students. Faculty from the Bay Area Community College Consortium (BACCC), including

Brady, discussed how, if there was one shared NETLAB+ data center and one person to administer it, they "could go teach". When Career Technical Education funds became available, the group was ready to put together an almost $1 million proposal to build the datacenter. They received word that funding was approved in April 2015, and they rallied quickly to build it by August of that year, just as the school year began. Brady says, "It was almost impossible but we pulled it off."

Later, BACCC raised additional funds to hire a data center administrator, David Hovey. Hovey is a former student who really knew the labs well. He is a good example of someone benefiting from NETLAB+. With his associate's degree from Cabrillo and the skills he acquired, he was able to achieve a number of certifications. These certifications aided in proving his experience in the field, which allowed him to get his current position. He is now also working towards his bachelor's degree in Cloud and System Administration, along with additional certifications that will both increase his marketability and his ability to maintain and optimize the NETLAB+ systems.

Hovey enjoys working as the data center administrator because the experience the students get with NETLAB+ "places them well above most candidates for jobs as the strictly theoretical experience many students receive is not as useful as someone who has actually done the work the company is requesting."