

CASE STUDY: From CyberPatriot Coach to NetAcad Champion

How an all-girls school in Hawaii is strengthened by an inspired STEM instructor



Sacred Hearts Academy, Honolulu, HI

Deborah Kula was wrapping up a busy academic year as a math teacher, chair of the math department, and robotics team coach at Sacred Hearts Academy in Honolulu, HI. An invitation popped into her inbox about an open house to discuss the upcoming CyberPatriot student competition.

“I remember thinking how well this competition could fit with our school’s mission,” Deborah says. “Little did I know how the competition—and my introduction to the Cisco Networking Academy program—would affect our students, our school curriculum, and my professional life.”

Sacred Hearts Academy is the largest all-girls' private school in Hawaii, covering pre-school to 12th grade. Its academic record is exceptional—almost 100% of its graduating students are accepted into college. Sacred Hearts is a leader in integrating technology into the curriculum in all grades.

“Even though I have a background in programming, I didn’t have much exposure to cybersecurity. I knew that participating in the CyberPatriot competition would involve a steep learning curve for me. The students definitely outpaced me in learning. They would say, ‘Don’t worry, Mrs. Kula, we’ve got it covered!’”

Instead of trying to become an expert in cybersecurity overnight, Deborah realized that she could play a much more valuable role: finding outside resources to help support her students.

Interest in the CyberPatriot competition continued to grow at Sacred Hearts. By the 3rd year, they had over 30 student participants in 7 teams. The need for resources to support student preparation intensified, so 2 more faculty members were recruited to help.

Discovering a valuable coaching resource: Cisco CyberPatriot Academy

Deborah learned of Cisco’s deep relationship with the CyberPatriot competition, through providing an online learning platform, a specific course for preparation, and coaches and mentors for the students.

“Cisco has a CyberPatriot Academy within the Networking Academy. There’s an instructor course, training modules for coaches and mentors, and quizzes and Packet Tracer activities. Because it’s online, it makes it easier for everyone—coaches, mentors and student teams—to fit into their schedules,” says Deborah.

Coaching resource leads to curriculum addition

Next, Deborah discovered that other Networking Academy courses were a great foundation for the competition, and beyond. When Cisco announced that any coach or instructor involved with CyberPatriot has an open invitation to bring other Networking Academy courses to their students, she saw instant value for her girls at Sacred Hearts. There were 2 things that struck her immediately:

1. Students did not have to be involved in the CyberPatriot competition to enroll, so she would open up the new courses to any interested students.
2. There were courses on topics like entrepreneurship and the Internet of Things (IoT) —subjects that could be of interest to a broad range of students and teachers.

When Deborah brought the courses to the attention of the Sacred Hearts administration, the response was overwhelmingly positive. “We recognize that we need to keep developing new learning opportunities for our students. Cisco Networking Academy courses will add so much to our STEM programs. Any educator who champions STEM knows how important it is to keep growing and strengthening STEM offerings.”

Deborah says that her own students gave her a barometer of interest in the Networking Academy curriculum. “They were excited about courses like the Internet of Things. I think some of these courses will attract students who aren’t into math or computer science. Every field will be affected by the Internet of Things, right?”

In Deborah’s experience, sometimes students discover an interest in STEM that wasn’t there at the start. “Students very often surprise themselves. They don’t think they’ll enjoy a STEM course or activity, and they end up loving it! It’s up to us as educators to encourage students to explore and investigate different fields.”

Over the next school year, Deborah will be looking at all the ways the school can expand its course offerings with NetAcad, including “... self-paced, self-enrolled programs, instructor-led courses taught in the classroom. It’s great to have the flexibility to integrate courses in different ways.”

A ‘kinder and gentler way’ to offer courses relevant to society

There are thousands of teachers involved in coaching CyberPatriot teams across North America. “I hope they all look into Networking Academy courses for their schools. It’s an amazing resource—more extensive and broader than I knew,” says Deborah.

From her own experience—and from recruiting faculty without tech backgrounds as coaches—Deborah understands why some teachers may be reticent to dive into an unfamiliar field of learning. But she describes Networking Academy courses as a “kinder and gentler way” of getting involved in subjects and materials that are so relevant to society.

“Believe me, I understand how daunting it can be for any instructor to not have all the answers. But technology is changing so fast we have to accept that an individual instructor may not have all the knowledge to teach a course in an emerging field. If we don’t accept this, we’ll always be behind the curve on STEM teachers. I’ve learned that there’s help to be found in the community. And there’s a wealth of resources associated with Cisco Networking Academy.”

Reflecting on how she has been affected personally, Deborah says, “I’ve expanded my professional contacts in the community far beyond what I ever expected. I love the fact that I can keep growing and learning as a teacher. I love the fact that I can stay where I am and still be exploring new areas of study after 30-plus years in academics. And if I ever do feel out of my depth, I know my students will be right there saying, ‘Don’t worry, Mrs. Kula, we got you covered!’

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