

Low-cost green computing for education

Turkish school system keeps it cool in the computer labs

Challenge

Lower overhead costs - including software and hardware upgrades and electricity costs - in two primary-school computer labs.

Solution

Cut costs by reducing energy and maintenance expenses with the NComputing L-series.

Impact

Experienced immediate cost savings and was able to expand computing access outside of the labs to the libraries, classrooms, and administrative offices.

Partner

NComputing partner Dojop, a distributor in Turkey, provided and implemented the L-series in the Kultur school system.

The Kultur School system is a leading private school system in Turkey with about 2,000 students and 300 staff. The system includes five preschools, two primary schools, two high schools, and a science-focused high school. "Bringing computing technology into daily teaching and exposing the students to the broader world is a key mission of the schools," says Mrs. Esra Ataç, chief of the school's computer department. "Information and technology is moving extremely fast and we want our students to use computers to creatively find information and solve problems."



NComputing L-series in a Kultur school classroom.

PC labs too hot to handle

Kultur had two computer laboratories with 26 PCs in each. The 52 PCs required constant attention by the computer department for hardware maintenance, software issues, security, and virus problems. Each PC used more than 200 watts of electricity, so the laboratories were using over 10,000 watts combined. The PCs also generated a lot of heat, which required even more electricity for the air conditioning system to cool the laboratories. It was a vicious cycle of expensive electrical waste.

“We were planning to upgrade the computers in the laboratories and wanted to find a more suitable system that was easier to manage and a lot less expensive to maintain”

MRS. ESRA ATAC
CHIEF OF TECHNOLOG
KULTUR SCHOOL SYSTEM

NComputing to the rescue

Kultur’s Technology Committee researched alternative solutions and learned about NComputing, which is distributed in Turkey by Dojop Teknoloji. NComputing harnesses the unused power of a PC to share it among multiple users at a fraction of the cost of individual PCs. In addition, this highly efficient system requires less electricity, less space, and less time to setup and manage, making it ideal for educational institutions like Kultur. Since the benefits of NComputing were so clear, the L-series was deployed in both computer laboratories.

A cool solution

Kultur first installed the L-series in the primary school’s computer laboratories. Mrs. Ataç’s computer department realized several benefits of the NComputing solution. First, since the school did not have to buy 52 new PCs, there was a significant up-front cost savings. Second, the computer department staff spent much less time fixing hardware and software problems because there were fewer PCs to manage. Third, the school will only need to upgrade a few PCs instead of 52. Finally, the L-series only uses 5 watts of electricity (vs. the 200 watts per PC Kultur was currently experiencing) so it provides dramatic savings in electrical use and air conditioning costs.

The teachers like the NComputing solution because they can monitor, track and control the student sessions. “We use software to track the student’s screen and help them with their computer learning. Occasionally, we have a student wander off to an unsuitable website or play a video game and we can control that,” says the IT teacher, Mr. Tuncay Karaçelebiarch.

Kultur has been very pleased with the deployments and is deploying NComputing throughout the school. Kultur has also installed NComputing in the library, teacher room, and administrative offices.

