Reliable Workstations Increase Student Productivity While Creativity Soars

NJIT
New Jersey Institute of Technology

Learn more about NJIT

**The College of
Architecture and Design
and the Art + Design program**

CoAD PROFILE

College of Architecture and Design (CoAD) established 2008

Part of a 130-year-old public university

First fully integrated digital imaging and modeling design curriculum in the U.S.

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CHALLENGE

In order to meet the rising demand for design-driven degree programs, the CoAD School of Art + Design decided to establish five new teaching labs that would be open for student use 24/7. The objective was to better support existing students and attract new talent to the school's digital design, industrial design, and interior design programs.

Mike Kehoe, CoAD's Manager of Computing Resources, and his team worked closely with college leadership to identify the daily digital needs of instructors and translate those into detailed hardware specifications. They then surveyed the top-tier vendors to develop a head-to-head comparison of the available options, including Lenovo's mobile workstation portfolio. Mike and his team report to NJIT's Information Services and Technology division, but are embedded in to CoAD in order to address the college's intensive use of technology.

During the evaluation process, Lenovo® and CoAD's teams worked closely together to identify the right solutions. "Lenovo really helped us figure out what we needed — this is the kind of partnership we look for in a vendor," says Mike. In a state-funded school, pricing was a key consideration, so it was significant that the Lenovo solutions also proved to be the most cost-effective.

IMPLEMENTATION

Working with Lenovo, the CoAD team identified different workstations appropriate for each lab as well as administrative use. In 2012, six Lenovo ThinkStation® D30s were selected for administration and research. Another 18 were selected for the video and animation lab to support applications such as Maya, Mudbox, and 3D Studio for video game design students.

In 2013, 84 ThinkStation S30s were selected for the four general teaching and foundation labs, intended for first-to-third-year students. The purpose was to support the same applications, as well as Unity, GameMaker, AutoCAD, Revit, Corel Painter, CorelDRAW, PhotoShop, and Illustrator.

Education

Lenovo™

Nate Soto, School of Art + Design Student

Manuel Diaz, School of Art + Design Student

" The increase in participation in Global GameJam is made possible by the productive collaboration between IT and the School of Art + Design "

— Mike Kehoe, Manager of CoAD Computing Resources

According to Mike, installation went without a hitch. For example, on a Friday in 2013, Mike and his team installed 40 ThinkStation S30s in two labs with the help of four work-study students and a local moving company. "We removed the old equipment, connected the machines, and started imaging," says Mike. "We were up and running in one day with no problems — a very smooth rollout."

In 2015, when CoAD replaced the machines in the video and animation lab with 25 ThinkStation P700s, installation took place during spring break with the help of only two work-study students again with no setbacks.

IMPACT

The ThinkStations have required minimal support, and Mike's team has received favorable feedback since day one. As a result, the technology has opened up new creative horizons for students and increased the productivity that instructors are looking for. When students need access to multiple machines to complete large projects, they develop a shared schedule, often working through the night and over the weekend.

"We like to see technology disappear into the background, that's how we gauge success," says Mike. "Our Lenovo equipment doesn't get in the way of instruction, and the ThinkStations let students do what they need to do without technical problems. When technology supports students instead of impeding them, they start exploring. But if they get frustrated by technology, they stop. Reliability is key to student productivity and creativity."

One indicator of CoAD students' engagement and creativity is their increasing participation in Global GameJam. This annual campus event brings together video game professionals and digital design students. At the 2016 GameJam, hosted in labs of ThinkStation S30s and P700s, CoAD students created 23 working video games, (a 60% increase from the 2014 GameJam), and shared them worldwide, all while learning about the increasingly popular profession.

The ThinkStation P700 diagnostics have been a boon to Mike and his team. "The ThinkStations are so advanced, and the USB diagnostics stick means we don't waste hours looking in the wrong place for the occasional problem. It smooths out the whole diagnostic-to-resolution process, up to a warranty parts request," says Mike.

Education

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— Mike Kehoe

NEXT STEPS

A total of 135 Lenovo ThinkStations are now supporting student creativity and productivity at CoAD. Looking ahead, Mike and his team want to expand into very advanced areas now available to them at a cost-effective price. Additionally, Mike and his team have begun renovations to an existing lab space, with the intentions of building out a motion capture studio using Vicon Bonita equipment as well as Lenovo ThinkStations. "A sound studio will be a great next step for us, building on what we have achieved so far," says Mike.

The Lenovo ThinkStation portfolio, powered by Intel® Xeon® processors, is designed to deliver serious computing power where and when it's needed, from research labs to real live work in the field. The workstations are just one piece of an end-to-end technology portfolio optimized for the value, vision, and innovation higher education needs to react to new priorities and opportunities.

Lenovo ThinkStation P700

To learn more, contact:

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