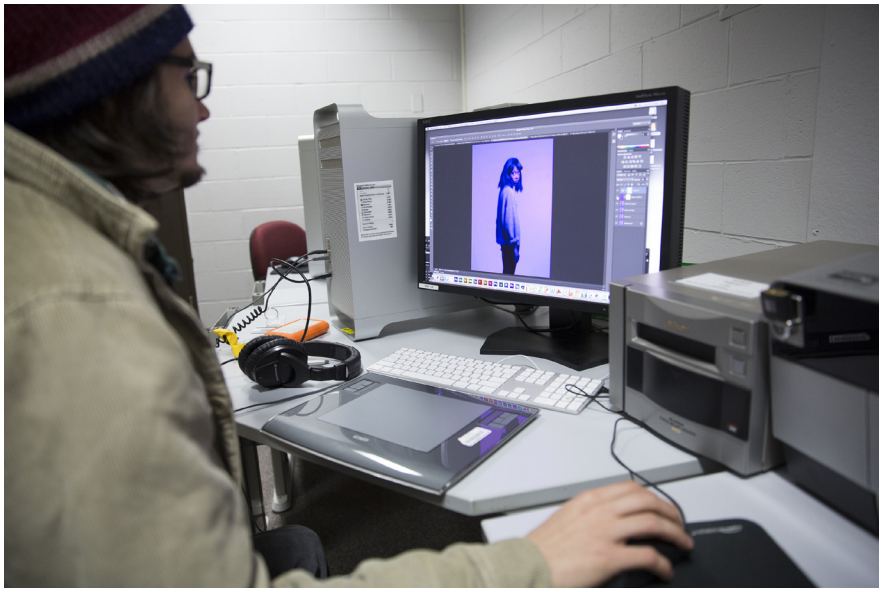
Students explore the world of photography using NEC monitors and software

Quick Facts

Facility: Rochester Institute of Technology, School of Photographic Arts and Sciences (SPAS)
Location: Rochester, New York
Challenge: Update computer lab with professional, color-critical monitors for student photography and graphics editing
Solution: 24" NEC MultiSync® PA241W
Date: August 2012

The Rochester Institute of Technology (RIT) is a leader not only in the Northeast but across the world for its programs in technology and the arts. Within the university, RIT's School of Photographic Arts and Sciences (SPAS) is regularly ranked as one of the best, offering degrees in everything from advertising photography to biomedical photographic communications to fine arts photography. The school has turned out multiple Pulitzer prize-winning photojournalists like William Snyder, well-known nature photographer David Muench, and acclaimed celebrity/commercial photographer Kwaku Alston, as well as many other leaders in the field. RIT's photography programs are world-class, with the graduates and the accolades to prove it.



Photography students using RIT's computer labs can take advantage of the numerous color-critical features of NEC's MultiSync P241W monitors and SpectraView$_{II}$ calbration software.

The Challenge

RIT credits its success to its career-focused education and a focus on providing photography students with the best learning tools possible. Academics focus on both the artistic side of photography as well as the technological.

In 2007, the school installed what, at the time, were state-of-the-art Apple MacPro computers with cinema screens as well as iMacs in its brand new computer labs. These labs contained stations where students could edit all types of media images, including still photography, video, animation and graphics. The workstations were used for standard classroom assignments to help students learn their way around various computer applications and course-related projects.

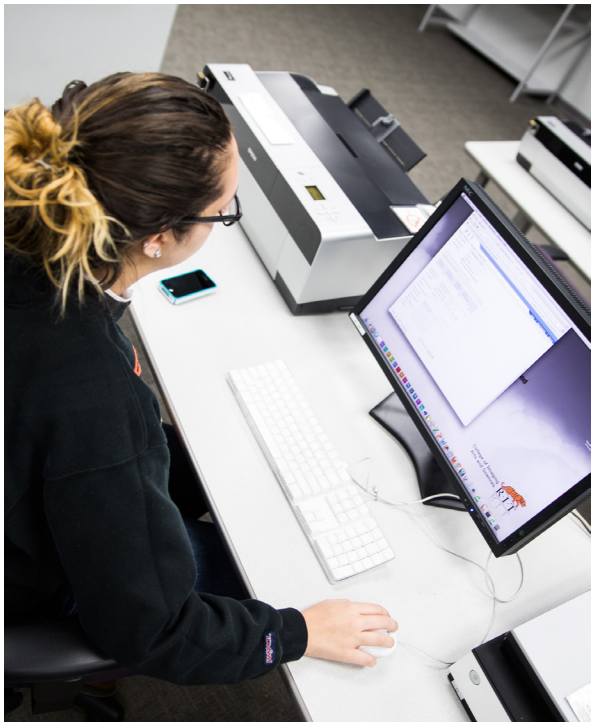
While the MacPros, cinema screens and iMacs had served students well for five years, SPAS Operations Manager Mike Dear could see that was no longer the case in 2012.

"We were in desperate need of an upgrade, especially when it came to the monitors," said Dear. "Technology changes quickly, especially in the graphic arts fields. Look at the explosion of full-length, computer graphic-animated features and 3D in movies. When we purchased our original computers

and screens, 3D in movies was an oddity, computer animation was still in early growth mode, and photography was still split between digital and film. Now you can see a 3D film practically every weekend at the local multiplex, and the use of film for photography has decreased significantly. It was time for a change."

Dear notes that while the MacPros, cinema screens and iMacs were still functioning, they were far from ideal for the students. In particular, the labs needed monitors that would be much more color accurate for the students who required greater precision from the screens to successfully complete assignments.

"When editing photography and video, what you see on the screen makes a huge difference in the final outcome," said Dear. "If the colors are off or there are other issues in consistency, students could end up making changes that make the images worse rather than better. In addition, they can't always be sure of getting the same workstation from session to session, so it's important that all the screens are calibrated to the same standards. That way it doesn't matter which monitor students use on a given day, because each workstation is identical. The old monitors couldn't do that, at least not to the standards of RIT, so we knew they needed to be replaced."



"When editing photography and video, what you see on the screen makes a huge difference in the final outcome," said Dear. NEC monitors and software help ensure consistent performance from screen to screen.

Two other technical issues driving the desire to replace the iMacs were the glossy screens that made it difficult to view and edit images, and the expired warranty.

"It's hard to edit on a screen that's reflecting back at you," said Dear. "The iMacs were preventing the students from getting clear views of the photographs they were working on, and the older model monitors and system didn't allow the students to be on the cutting edge of photography. That's not good for a school with the reputation of RIT. We also realized purchasing new monitors would carry fresh warranties, helping us control our repair costs."

Then there was the issue of the impression being made on prospective students. When comparing universities, high school students and their families look closely at the quality of the equipment offered to students. Dear feared that if a prospect saw old, outdated equipment, it would reflect poorly on RIT. A good first impression was necessary and another reason for a lab upgrade.

Dear's team searched for monitors that would give students the precision required to edit and work with both still images and video files. The screens also needed to be durable to withstand the constant usage of a university computer lab.

"We needed something high-quality with lots of capabilities, that was also in our price range," said Dear.

The Solution

After looking at several product lines and consulting with others at RIT, Dear decided to purchase 87 of NEC's 24" MultiSync PA241W professional graphics desktop monitors to replace all of the iMacs. He said there were other screen options that they considered, but NEC's product provided the best solution with the capabilities required by RIT students.

"I had worked with NEC products in the past and knew the quality as well as the exceptional support provided by NEC," said Dear.

The widescreen PA241W monitors support 14-bit 3D internal programmable lookup tables for calibration with 98.1% coverage of AdobeRGB color space, allowing students to use Adobe programs when working on editing photography, video, motion graphics and animation. Having color calibration capability was important to the SPAS staff when choosing the new technology.

"We wanted to make sure that the monitors were calibrated," Dear said. "The images and their colors need to be identical from station-to-station. Imagine if you were working on a project and thought it looked perfect on one screen, only to start up the next day on another computer and find that the colors looked different on that monitor. It could change the whole outcome of the project."

Students can use the complimentary MultiProfiler software to control the PA241W's sophisticated technologies, including automatic generation of ICC/ColorSync profiles, and picture mode preset configurations for quick access to multiple color spaces. The PA241W monitors also adapt to their surroundings with AmbiBright™, an ambient light sensor that automatically adjusts the display's brightness based on the lab's lighting conditions. Since the monitors were installed in a number of different computer labs, all with different lighting situations, this technology improves the precision that is so necessary for the students.

Internally, the monitors continue to offer the best in color and digital imaging. In order to make the photographic images as precise as the students need them to be, Dear and the RIT staff decided to go a step further in their purchase and invest in NEC's SpectraView$_{II}$™ software. Designed for professionals in color-critical applications, the software combines a color-measurement sensor and sophisticated calibration software, resulting in a highly accurate, reliable, repeatable, feature-rich solution for display calibration and profiling.

"We've been really impressed with SpectraView," said Dear. "It allows us to see colors more accurately and consistently, which is critical for our students and their work."

The students have been impressed with the project as well. RIT finished installing the monitors in August 2012 in time for the beginning of the school year. The difference was noticed immediately.

"Our primary users, the students and faculty, are thrilled," said Dear. "We achieved our goals and so far I would say that these new monitors are not only a success but a welcome improvement to our computing environment. Our goal is to provide the students with the tools they need to be successful, and these undoubtedly do that."

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