High-tech color guard

Densitometer donation helps students in cross-media classes

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A colorful, poster-size print came off a press in the University of Wisconsin-Stout printing lab in the Communication Technologies Building.

Print Optimization class students, who had prepared the press ink fountains, pulled the poster aside and began to check the accuracy of the colors.

Under the guidance of Assistant Professor Barb Bear and Print Lab Manager Chad Nyseth, the students first huddled around a light table. Then, several of them took one of the prints to another table and held a device about the size of a flashlight over color portions of the printed piece.

The device, like a magic wand, quickly told students on a small readout screen exactly how accurate the colors were. Were the red and yellow, for example, the precise shades of red and yellow as they had specified when they put the project on the press?

The numbers on the device said no. “They’re all too low. There’s not enough ink,” said Meghan Speckin, one of the students in the class, after seeing the numbers.

The battery-operated spectral color reader is a Techkon USA SpectroDens Color Densitometer. UW-Stout recently purchased one for the print lab, but with more than 20 students in the class it needed two. Techkon USA donated the second densitometer,

which has a retail value of close to $7,000.

“We use it a lot in setting up a print project and then a few times when it’s actually printing,” said Speckin, of Sussex.

Previous color measurement devices in the lab were not as accurate as the students needed them to be in order to print to industry standards, Nyseth said.

Students in the class are majoring in cross-media graphics management. They learn to use a variety of presses in the Bachelor of Science program, which trains them for management positions in printing and media-related industries.

The Techkon USA device, which has an optical reader underneath, can be used by students whether they are operating the large Heidelberg offset press — as the Print Optimization class was using — or five other presses in the lab.

“These densitometers also can measure directly from a metal offset printing plate before the plate is installed on an offset press, saving time, ink and paper,” Nyseth said.

The device even suggests how to adjust the ink density on the press to get the best color match.

“I’m thrilled to have the Techkon reader. It’s a Cadillac piece of equipment,” Bear said, noting that students likely will use the equipment professionally, so using it now helps better prepare them for their careers. “It gives students experience on a variety of presses.”

Another student in the class, Alison Holets, of Byron, Minn., said that the Techkon USA equipment required some initial training but hasn’t been difficult to use. “We can do readings as something is printed, so we can tweak the press as it’s running,” she said.

Along with the donation, Techkon USA has provided free product support and live training for students via two-way videoconferencing.

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Photos

Top: UW-Stout Print Lab Manager Chad Nyseth and student Alison Holets work with a printing plate on the Heidelberg offset press.

Middle: Assistant Professor Barb Bear, center, guides cross-media graphics management students Meghan Speckin and Cody Simonis as they use a new densitometer color reader donated by Techkon USA. Simonis has it in his hand.

Bottom: The Techkon USA SpectroDens Color Densitometer helps students in the print lab determine color accuracy.