“Our new rooms with TeamWork Systems allowed us to create a learning environment that enables instructors to more easily interact with students, and students to work more collaboratively with each other.”

Gary Brown
Dean of Business
Western Technical College

Western Technical College in La Crosse, Wisconsin, strives to provide a collaborative environment that enhances the interaction between students and instructors. To support this goal, the college recently added AV collaboration capabilities to one of its classrooms and a Business Partnership Center conference room. When it was time to design and implement these systems, Mike DeBoer, the Chief Engineer at Western Technical College, selected custom Extron TeamWork® Collaboration Systems and TouchLink®-based control systems.

AV Needs
Western Technical College wanted to add AV collaboration systems that would enable students to work in small groups to complete assignments and share their ideas or results with other teams and the instructor. The upgraded classroom would include five collaboration pods for up to six students at each table, while the conference room would provide three additional collaboration pods supporting up to four or six students per group. Each room required flexible AV routing and distribution from the pods and instructor’s desk to the room’s multiple display devices. The college also wanted the systems to be so easy to use that students could simply connect their laptops or other mobile devices and start collaborating with minimal effort. In order for the rooms to be ready for upcoming classes, DeBoer needed to install, setup, and verify the AV collaboration systems within five days.
TeamWork Collaboration Systems provide an intuitive way for students to share their work and ideas with each other and the instructor, simply by connecting their laptops to system “Show Me” cables and pressing the “Share” button.

Western Technical College Enhances Student Collaboration with Extron TeamWork Systems

Custom TeamWork Collaboration Systems

Each pod in the classroom and conference room includes a custom Extron TeamWork Collaboration System. TeamWork systems provide a quick and easy way for students to collaborate on assignments. Students connect their laptops or other mobile devices to the TeamWork system using Extron HDMI “Show Me” Cables. TeamWork “Show Me” cables provide the user interface for the system. By pressing the “Share” button on a connected cable, students can control who is presenting on the wall-mounted display at the end of the group’s table. The “Share” button also lights to clearly identify which device is connected to the display.

DeBoer installed Extron Cable Cubby® Cable Access Enclosures in each table. The Cable Cubby enclosures provide convenient storage for system “Show Me” cables and AC power connection points for student laptops. Each time a student presses his or her “Share” button, an Extron SW HDMI Series HDMI switcher, mounted under the table, selects the correct source and routes the presenter’s content to the display. At the end of the session, students simply disconnect their laptops, and the switcher and display enter standby mode for the next collaboration session.

Each classroom pod includes two displays mounted side by side, so students can see their content on one screen and the content from an instructor-selected source on the second screen. These sources include a resident PC, document camera, and support for virtually any other HDMI source. Instructors have complete control over what is shown on the secondary display at each pod and the classroom’s projector. All of this AV switching and routing flexibility comes from an Extron SW4 HDMI switcher and an Extron DXP HDMI Series 8x8 matrix switcher in the equipment rack. The DXP HDMI matrix switchers feature a number of exclusive Extron technologies including EDID Minder® to manage the resolutions of connected displays, Key Minder® to help minimize HDCP issues, and SpeedSwitch® to provide quick switching of HDCP-encrypted content.

DeBoer also selected Extron DTP HDMI 230 Twisted Pair Extenders for sending audio, video, and control signals between the conference room or classroom AV devices, and the matrix switchers in the equipment rack. The DTP HDMI 230 extenders help simplify the cabling infrastructure by carrying high resolution video and RS-232 signals over one CATx cable.

“Our new rooms with TeamWork systems allowed us to create a learning environment that enables instructors to more easily interact with students, and students to work more collaboratively with each other,” says Gary Brown, Dean of Business at Western Technical College. “The technology also allows students to connect laptops or...
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The conference room includes three pods with TeamWork Collaboration Systems that support up to four or six students per table. The TLP 700TV TouchLink Touchpanel at the instructor’s desk allows the instructor to easily select which presentation should appear on all of the room’s display devices.

tablets to compare their work to material presented by the instructor, and with each other. The reaction from both the students and the instructors has been very positive.*

Convenient TouchLink-Based AV System Control
Instructors in the classroom and conference room can control the AV systems from their desk using an Extron TLP 700TV 7” Tabletop TouchLink Touchpanel. Each touchpanel is paired with an Extron IPCP 505 IP Link® Control Processor in the equipment rack. Normally the students see the signal from one of the local computers on their monitor. However, when the instructor has any content that should be shared with the entire class, an instructor can use the intuitive GUI to easily select which student presentation or source to show on all of the room’s display devices.

Afterward, the instructor can return all monitors to local view for each student group. The TouchLink touchpanels also enable instructors to adjust audio levels, mute audio and video, freeze the displayed image, as well as power the projector and displays on or off.

Results
The custom TeamWork Collaboration Systems were quickly ready for upcoming classes. “Our new rooms promote a collaborative learning environment which is much different than the traditional lecture experience of the past,” says Joshua Gamer, Associate Dean of Business at Western Technical College. “The technology allows for increased sharing of each student's work, ease of teamwork, better visibility of content, and access to computers without the restrictions of fixed desktops.” He adds, “Both students and faculty have come to enjoy and appreciate this new learning environment.”