FLEX-LT Case Study

Muhlenberg College -
Media & Communications Building

FSR

WHERE: Allentown, PA
WHEN: February 2015
WHAT: FSR HuddleVU HV-1000 (x2), FSR 8x8 matrix switcher, FSR FLEX Control System, FSR Digital Ribbon Cables
WHO: Sean Miller, Thomas Sciarrino, Anthony Dalton, Muhlenberg College

Challenge

The staff at the Muhlenberg College wanted to optimize every bit of space on their very traditional campus by creating an area where students could heighten their leaning experience as well as work together in smaller assignment oriented groups. The task at hand was to transform a little used alcove in the John and Margaret Wilson Communication Hall into a technologically advanced room furnished with the latest collaboration equipment and control system technology. The team was further challenged by their resolve to design a modern, light, clean and open space that was easy for students and instructors to use, unaided, while maintaining the architectural integrity of the classic campus.

Solution

The Muhlenberg team, which includes Sean Miller, Thomas Sciarrino, and Anthony Dalton, designed a flexible space from the ground up that is capable of adjusting as needs and groups differ. The team furnished the room with two FSR HuddleVU HV-1000 collaboration systems, an FSR 8x8 matrix switcher, an FSR FLEX Control System, and FSR Digital Ribbon Cables to ensure students and staff were equipped with the tools they need to succeed.

Results

The Media and Communications Building is now equipped with a technically advanced, flexible room that serves as a study area, class room and meeting room and is capable of accommodating entire classes, independent group work, and individual students. Also, in an effort to introduce this new type of room to the rest of the campus' faculty and staff, it's available for departmental meetings.

What's Inside

A custom built banquette offers a permanent space for the two FSR HuddleVU table boxes that each house four color coded HDMI cables which can be connected to any of the eight school issued MAC books that are provided in the room, or which can be connected to the users own personal devices. Four modular tables can be configured to accommodate more formal meetings, or be rearranged for small groups.

Each of the two HuddleVU stations has a local display, with a third display on the corrugated metal wall at the instructor's station. Also at the instructor's station is an FSR FLEX room control that Dalton customized to maximize room flexibility.

The FLEX offers students and instructors three modes to choose from: Laboratory mode, which allows all three stations (two HuddleVU and instructor) to operate independently of each other; Collaboration mode (the most used mode), which allows the instructor to route any connected source to any one, two or all of the displays; and Presentation mode, which is used when the instructor wants his/her source on all displays; the source at the instructor station takes over the rest of the room. The customized FLEX programming offers tips and help on each screen that the instructor can click for tutorials on how to run the room, work the control or modify display sources.

Regarding the equipment and the tech support provided by FSR, Sciarrino says, "The systems did not take very long to install and the installation was not complicated. The Digital Ribbon cables run the full length without issue or loss of resolution and without need for extenders. The FLEX [program] is so easy to change. All the feedback offered by students and faculty allow us to make changes real time, and the programming can be modified or reset simply and quickly. FSR tech support was exceptionally easy to deal with and available when we needed them. They gave us the information and help we needed in a timely manner without exception."

A glass wall, originally intended to keep noise out, now doubles as a useful dry erase board for brainstorming sessions or instructor notes. The glass allows for a light, open feel and also offers passersby the ability to view the new room in use and hopefully garner new interest for additional rooms like this around campus.

"We built this room in our test bed first and we were so happy," commented Sean Miller. "It literally did everything we wanted
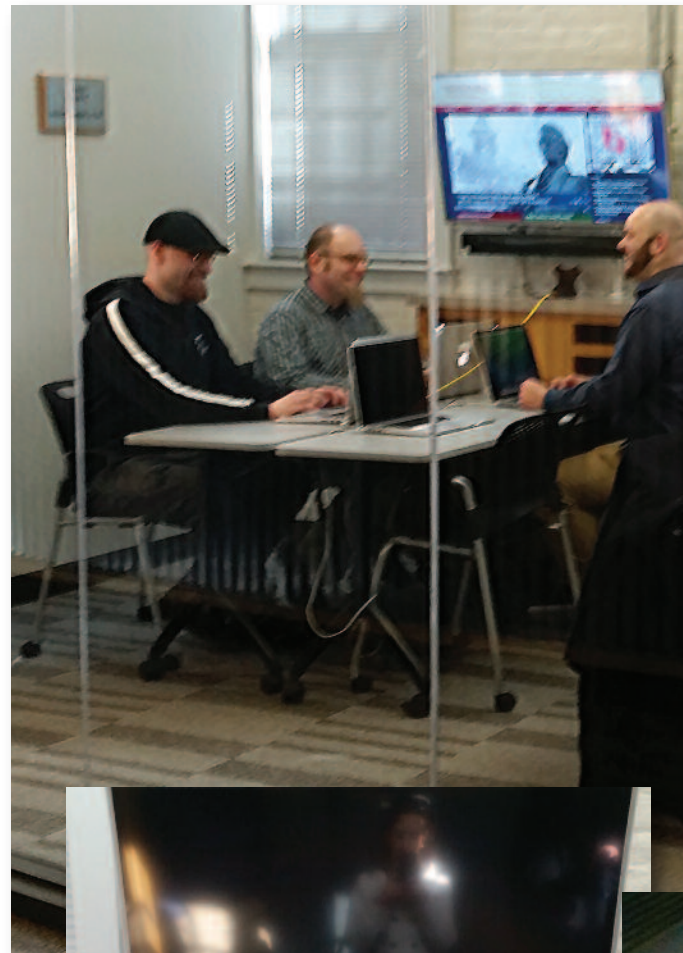
and designed it to do. The limitations are only due to the space, not the equipment."

According to Dalton, the instructors were impressed, "Initially they were overwhelmed with how many capabilities we programmed into the FLEX. But once they are trained, they love the ability to route any source to any display. They find the help tip capability to be valuable."

He also provided feedback from the students, "The students say the room, especially the HuddleVU tables, are easy to use and understand. They love the capabilities. We allow 24/7 access to the room because they have clearly shown us that they can use it without assistance. Additionally, since the Muhlenberg campus is very traditional, this room is being used by students for its "cool factor'."

Looking Forward

The team has made the room available for the rest of the campus' faculty and staff for departmental meetings in an effort to introduce them to an efficient and flexible model of learning and the benefits of hi-tech collaboration. The plan is to continue to design and build similar small group collaboration spaces around campus.

About the System Components

The HuddleVU HV-1000 is a single table box system using a FSR HV-T6 table box for 1 to 4 users to plug in and power their laptops or devices and simply push a button to display their desktop information on the main display. Color coded HDMI cables, match corresponding integrated button on the HV-T6 Table Control unit. The HV-1000 System includes an HV-T6 table control unit, a controller, a switcher, and cabling for up to four users.

The FSR DV-HMSW4K-88 8x8 HDMI Matrix Switcher routes 8 HD sources to any 8 HD outputs. The unit supports 1080p full HD up to 4K plus all 3D formats, along with multichannel digital audio formats such as PCM, Dolby True HD and DTS-HD Master Audio. Key Features include the support of resolutions up to 1080p@60HZ 48-bit deep color, 4k@30HZ; the ability for any source to be displayed on multiple displays at the same time; the ability for any HDMI display to view any HDMI source at any time; PCM, Dolby TrueHD and DTS-HD master audio pass through HDMI output; multiple switching mode, push button, IR remote control, RS-232 control, and TCP/IP control; full 3D pass through; and HDCP compliant.
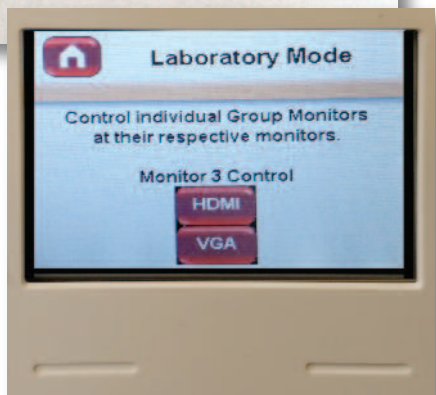
The Flex-LT is a self-contained control system that has a vast number of features and a price point that everyone

can afford. The Flex-LT mounts in a wall or sits on a desk and presents the user with an easy-to-use and understand color touch screen. Through the touch screen the user can choose what source is being displayed, change the volume, control the various sources, turn lights on and off, raise or lower the shades or screen and more. Using the built in scheduler, the Flex-LT can automatically shut off displays that have been accidentally left on when the room is not in use. It can also alert the support staff if there is an issue in the room such as the lamp life getting too high in order to reduce the down time of the room. The Flex-Able configuration utility features an easy-to-use method to get the most out of the system. The contractor is presented with an easy-to-follow drag 'n drop programming methodology. Flex-Able eases device control by offering IR libraries or if a library is not available, the Flex-IR learner is a snap to use.

FSR's DR-PCB-HxxM Digital Ribbon Cables utilize a proprietary technology to allow high speed, high definition HDMI signal transmission over distances of up to 325 feet. The cables' hybrid fiber/copper structure delivers a speed of 10.2 Gb/sec video bandwidth and can easily handle 1080p full HD, 3D, deep color, HDMI-CEC, HDCP and most newer hi-res formats.

About FSR

FSR, established in 1981, manufactures a wide variety of products for the audio / video, education, hospitality, government, and religious markets, including AV floor, wall, table, and ceiling connectivity boxes, as well as a full line of interfaces, distribution amplifiers, matrix switchers, seamless switchers and CAT-5 solutions.

All FSR products are designed and manufactured in its Woodland Park, NJ facility. The company is an Energy Star Partner and complies with the American Recovery and Reinvestment Act of 2009 to demonstrate its deep commitment to preserving the planet. FSR offers live 24/7 technical and sales support throughout the country from expertly trained technicians and sales representatives.

For more info: fsrinc.com.

About Quality Sound

The Department of Media and Communication at Muhlenberg College is a vibrant community that explores and creates all forms of media — visual, digital, print, oral — and investigates the social, political, economic, and cultural contexts that both shape and are shaped by these converging forms. Here, critical thinking meets hands-on experience. Many students link their studies with service to the community. Most students immerse themselves in professional media environments through the school's internship program. Graduates from the school's program enter media industries from Barcelona to Los Angeles. Others pursue graduate studies in law, journalism, film and video production, mass communication, and education. The school's aim is to foster graduates who are not only information literate, but who become information leaders in helping to realize the democratizing potential of media.

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