Utah Valley University's Digital Learning Center Project Paves the Way for Future Generations

Founded in 1941, Utah Valley University offers 60 Associate Degree programs, 15 Certificate Programs, and 6 Diploma Programs, as well as a higher education college offering 58 Baccalaureate degree options. The former Utah Valley State College became Utah Valley University in 2008, now offering Master's degree programs. As of the fall 2008 semester, the Orem, Utah institution increased student enrollment to close to 27,000 students and has become a Mecca of academic, vocational, technical, cultural and community activities. As a result of rapid growth experienced over the years, upgrading current facilities and new construction has become a key element in the college's strategic plan.

Part of the strategic plan included expanding the campus library. In 2003, UVSC officials realized the campus library, built in the late 1970's, could not serve its students with adequate space and resources. The original library was a 35,000 square foot building with shrinking study spaces to accommodate supplementary textbook shelving. College President William Sederburg made construction of a new library facility a top priority. A few years later, this plan became a reality and construction commenced on The Digital Learning Center, expanding the library space to 190,000 square feet.

The Digital Learning Center is a five story state-of-the art facility offering students the latest in audio, video and voice applications. (Photo courtesy of Utah Valley University)

BUILDING PLANS

UVSC's Tom Branam, Director of Telephone Services, has been with the college for over 15 years. Tom was instrumental in developing the Center's complete master specification, detailing voice and data networking requirements. Since this project called for expansive voice/data/audio/video needs, extensive plans were developed to accommodate bandwidth intensive amenities within the building such as a new data center serving the entire college, media center, 40 study rooms including HDTV access, wall access portals where students can connect laptops, instructional labs and a 150 seat meeting room with teleconferencing capabilities. The Digital Center plan incorporated the existing "Mall Configuration" concept in which all campus buildings are connected by glass hallways.

MEDIA SELECTION

Mr. Branam has always felt that “your best investment is your infrastructure”. With the recent introduction of 10 gigabit over copper, Mr. Branam saw this product as a perfect fit to meet the Digital Learning Center’s proposed and future bandwidth needs. Mohawk’s Giga*LAN 10*® copper product was selected. Mohawk’s Giga*LAN 10* is the highest performance Category 6A UTP cable which supports 10G BASE-T (10 Gigabit Ethernet) applications over a full 100-meter channel and provides 750 MHz confirmed stability. The unique Flex Web® combined with a patented fluted jacket construction isolates cable pairs and offers outstanding pair-to-pair balance for superior headroom and maximizes Alien Crosstalk performance. The cable exceeds Draft TIA 568-B.2-10 and Draft ISO/IEC 11801 Class EA.

Since the cable capability lifecycle is typically around ten to fifteen years, the college wanted to invest in an Augmented Category 6 system in an effort to “future proof” the building. According to Mr. Branam, “If you do it right the first time, it will not have to be repeated in the future.”

TECHNOLOGY CONTRACTOR SELECTION

Cache Valley Electric Co., headquartered in Salt Lake City, Utah, was selected by the college to provide and install the cabling infrastructure for the project. Because of the large scope and aggressive timeline for completion, CVE was an excellent fit because of their size and available resources. Additionally, CVE has had a successful history of working on large projects for the college. Tim Hadden, RCDD serviced as the project manager representing CVE on the project. According to Mr. Hadden, the new building “Will be a showcase for every college and university. I believe this was the first 10 gig college installation in the state of Utah.” For logistics and material handling support, CVE selected Graybar Electric for the project based on their local staging capabilities and extensive experience in supporting projects of this size.

FUTURE PLANS

The Digital Learning Center opened July 2008 and Utah Valley State College became Utah Valley University. The college is currently expanding the Master’s Division to add Business and Nursing to the college’s vast academic offerings and has applied for NCAA status. Utah Valley University has future construction plans including a new science building and a quad dormitory on its expanding campus.

Mr. Branam believes the choice of Mohawk’s Giga*LAN 10* was a cost effective solution for the demanding needs of the Digital Learning Center. By meeting the Center’s current and future bandwidth requirements, “the return of investment with this solution will benefit our students, faculty and community.”