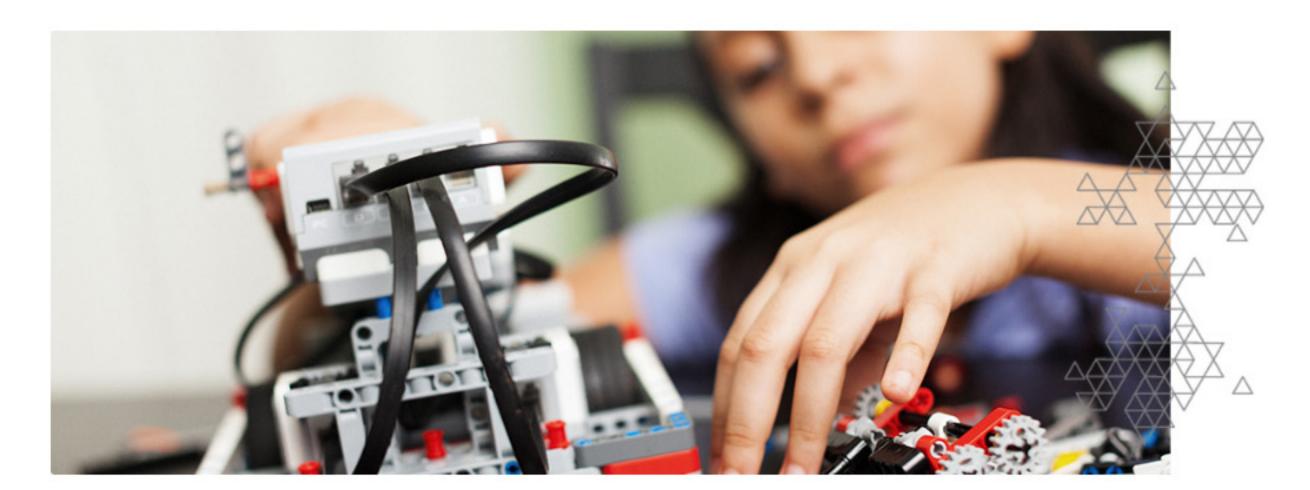


#### A CASE STUDY IN EDUCATION

#### THE KING'S ACADEMY AND UDT DEMONSTRATE HOW 21ST CENTURY EDUCATION CAN TRANSFORM A SCHOOL



#### EVERY SCHOOL SHOULD BE THIS COOL

For an exceptional example of United Data Technologies' (UDT) trusted advisor relationship in an educational setting, look no further than The King's Academy. This Christian college-preparatory school serves more than 1,400 students in preschool through 12th grade on campuses located in Palm Beach County, Florida.

The Academy takes an age-appropriate approach to technology in education, focusing on teachercentered instruction and traditional learning tools in the early grade levels, with very little exposure to computer screens. As pupils progress to higher grade levels, they enjoy more hands-on experience with an enviable array of professional-grade multimedia equipment and high-performance computing systems.

"It is a cool place," said Glenn Martin, Director of Development for The King's Academy. (Besides being a 20-year employee, Martin is an Academy graduate whose own children became students as well.) "We've had amazing opportunities to implement technology that Christian schools particularly have not always had. This is because we have forward-thinking people in positions of leadership who allow us to invest in areas that other schools might not see the value of."

Helping to guide the Academy's technology strategy is another active TKA parent: Danny Rodriguez, Chief Technology Officer for UDT and one of the nation's preeminent specialists in technology for education.

"What Danny brings to the table is the ability to help us make wise decisions," said Martin. "A school like ours could spend a million dollars, year after year, on brand new technology, which can feel like a black hole. UDT has tremendous knowledge of the technology and future trends, helping us make good choices with our limited tech dollars."

Among the many projects for the Academy in which UDT has taken a leadership role, the following four areas were critical:

#### **Developing STEM labs**

The King's Academy wanted to bolster its resources for exposing students to science, technology, engineering and mathematics (STEM) by modernizing the equipment used in the upper school for engineering and robotics programs. Previously the program was struggling with older, white-box machines that were not engineering-class, lacking sufficient power and discrete graphics. UDT worked with the Academy to design and recommend HP Z-class workstations for their engineering environment, maximizing a tight budget to build out a productive and successful engineering lab for their upper-level school.

The following year, impressed with the amazing work the upper-level students were completing, The King's Academy turned its focus to the elementary school, introducing an after-school STEM program. Later, the Academy incorporated STEM into the daytime curriculum as well, working collaboratively with UDT.

"The strategy is to create exposure for students in the early grades so they can get an idea of what's available and where their interests might lie," said Rodriguez. "Once they figure that out, the intent is to focus them in middle school and high school into specific areas of engineering." Wherever their interests lie, students can begin to sharpen their focus as they continue toward college.

## Transforming communications with digital signage

Comprising a large, main campus with 14 buildings and 1,250 students, The King's Academy wanted to modernize the way it delivers announcements, news of upcoming events, school schedules, and other content to raise awareness. The Academy wanted to move away from the reams of printed material stuck in take-home folders that end up in the garbage. They had tried consumer-grade digital signage, but it failed consistently and lacked a clean, professional design.

Partnering with Samsung, UDT created a more robust digital signage solution that modernized how the Academy communicates with students, faculty, and administrators; they deployed 23 digital signs around campus. Signs were waterproofed for outdoor usage, featuring ultra-high brightness for daylight viewing.

In the cafeteria, traditional menu boards were replaced by the new signage, which lists all choices and includes nutritional information. The use of commercial-class displays in every building allows the Academy to control and update messages as needed, quickly publishing new information to the signage with greater control over content.

## Professional quality UHD video production

The Kings Academy asked UDT, "if we give you a classroom, can you turn it into a digital media studio?" UDT engineers and architects assessed the space and returned with a practical design for a state-ofthe-art TV production studio that supports ultra-high definition and 4K cameras, lighting, and three unique environments:

- · A studio complete with news desk, green screen for chromakey effects, and other production staging capabilities.
- A control room where student-engineers can adjust sound and lighting in the studio.
- Post-production space for digital editing and effects rendering. In just two years, the digital media production facility has grown from two classes per day to a full

schedule and an after-school club as students have increasingly shown interest. The Academy later approached UDT in regards to deploying wireless broadcast and recording capabilities from anywhere on campus. For example, producing football game coverage with multiple HD cameras and pushing content back to the studio to be produced by students and broadcast online or via digital signage.

The result has been a popular, new curriculum area in digital media production, giving students the exposure to discover their interest in digital media, and apply it in real-world scenarios.

## Repurposing traditional libraries with makerspaces

Like other schools, The King's Academy had invested in an impressive library space, only to see technology render it outdated. "Very few modern students pick up a book," said Rodriguez, "they go online to read." By signing up for an online library, schools now have access to hundreds of thousands of titles accessed by computing devices; consequently, libraries now are under-utilized spaces.

The Academy moved to curate its book collection for younger grade levels, which emphasizes the importance of still picking up a physical book. For the middle and upper grade levels, they turned to UDT to re-imagine the library space. UDT worked to build multiple unique spaces inside a new media center for "makers", students working together in collaborative endeavors. UDT's solution included:

- The Cube, consisting of three glass walls from floor to ceiling, and modern technology inside that allows for focused learning opportunities, connecting to myriad multimedia sources for an engaging learning environment. This space is fully enclosed but still physically part of the maker center.
- A large saltwater aquarium just outside the glass walls of the Cube, bringing an engaging natural element into the space.
- New bookshelves for the newly curated library space, with comfortable modular furniture and mobile workspaces that can be moved around to create unique spaces for young users. The maker center is also equipped with digital signage that can be moved around to create connectible displays.

The makerspace is centered on collaboration in uniquely configured environments to support new

learning opportunities. This creative space is enabled by technology, multimedia and automation systems and wireless connectivity - all customized and engineered by UDT. "It used to be a sleepy library, now it's an active space," said Rodriguez. "The media center stays

open for later hours, and students truly want to use this space. It's not unusual to see the space

your school to transform, engage and empower through a 360° relationship with UDT.

# teeming with activity at four or five o'clock in the afternoon – long after classes have let out."

Is it time to advance your education technology? When you're ready to re-imagine the role of technology in your schools, call us and our experts will help