





CASE STUDY

Transforming Learning Spaces At Legacy Magnet Academy

Client: Tustin Unified School District (TUSD) **Location:** Legacy Magnet Academy, Tustin, CA **Project:** Indoor-Outdoor Classroom/Auditorium Video Wall **Partners:** Advanced Classroom Technologies and OneScreen



Introduction

Tustin Legacy Magnet Academy, located in the heart of Tustin, California, stands as a beacon of innovative education within the Tustin Unified School District. As a premier K-8 institution, the academy is dedicated to fostering a diverse and inclusive learning environment that prioritizes STEAM (Science, Technology, Engineering, Arts, and Mathematics) education. With a forward-thinking curriculum that integrates hands-on learning experiences, Tustin Legacy Magnet Academy prepares students for the challenges of the 21st century, equipping them with the skills and knowledge needed to excel in an increasingly complex world. The academy's commitment to academic excellence, coupled with a strong focus on community and collaboration, has made it a model for other schools striving to create dynamic and engaging educational experiences.

In this case study, "Transforming Learning Spaces at Legacy Magnet Academy," we explore how the integration of a cutting-edge video wall solution has revolutionized the new indoor/outdoor classroom and amphitheater, further enhancing the academy's innovative approach to education.

Project Overview

Tustin Unified School District sought to seamlessly blend cutting-edge technology with the stunning architectural design of Legacy Magnet Academy, crafted by PJHM Architects. Their vision was to integrate a state-of-the-art video wall into the beautifully designed indoor-outdoor classroom and amphitheater, enhancing the space's aesthetic while elevating its functionality for multimedia presentations, stage performances, and other educational activities. Advanced Classroom Technologies was thrilled to represent OneScreen in an open bid and honored to win the project, contributing to a learning environment that complements the academy's remarkable architecture.

The Challenge

Find a large scale video wall solution that will complement the beautiful architecture of the Legacy Magnet Academy, as well as provide the following must have features.

Comprehensive coverage: The Legacy Classroom video wall needed to fit a wall space nearly edge-to-edge, providing a seamless and immersive viewing experience from the exterior amphitheater seating.



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High Resolution: The video wall should deliver 4k resolution at a viewing distance of 20 feet, providing clarity of content to the entire amphitheater audience

Durability: Given the outdoor amphitheater setting, the video wall had to withstand elements such as moisture, wind, temperature, and ambient light.

Budget-Friendly: The video wall solution chosen must be cost-effective without compromising on quality or functionality.

Ease of Use: The entire video wall system needed to be user-friendly and easily connectable to various devices with multiple port

"The general consensus when walking this campus is that you don't feel like you're at a high school. It is truly a college level or professional environment designed to be impressive. That is what we had in mind when we sought out to find the perfect video wall to upgrade the space. ACT and OneScreen provided exactly what we were looking for."

TUSD Director of IT - Dr. David Smith



For the ambitious video wall project at Tustin Legacy Academy, ACT was excited to collaborate with partner, OneScreen. OneScreen's video wall solution was perfectly suited perfectly suited to meet the requirements of TUSD.

The chosen solution was a OneScreen 4YS 300 Virtual Wall which checked all of the boxes for TUSD and offered several outstanding features:

Technical Details

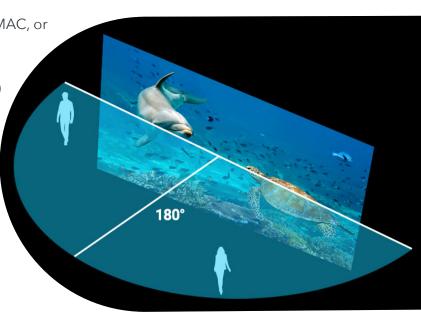
DISPLAY HIGHLIGHTS

- Clean form with low power consumption and ultra-light weight design.
- 20-bit color depth, 7680Hz ultra-high refresh rate, and 15,000:1 high contrast ratio.
- 6000 nits brightness, ensuring an exceptional display even under direct sunlight or at night.
- Fully-enclosed cabinet (IP65 rated for both front and rear), capable of operating in harsh environments.

CONTROLLER HIGHLIGHTS

- White glove delivery and installation service from a OneScreen expert.
- Android 9 based system with support for various Android applications.
- 32 GB inbuilt storage and 4 GB RAM.
- Wireless screen sharing capabilities via phone, MAC, or Windows.
- Support for mainstream video formats (MPEG1, MPEG2, MPEG4, H.264, WMV, MKV, TS, FLV, etc.) and audio formats (MP3, etc.).
- Image formats supported a include JPG, JPEG, BMP, PNG, and GIF.







Installation Process

The installation of the video wall was a carefully orchestrated endeavor, managed to ensure a seamless and efficient integration into the new indoor/outdoor classroom and amphitheater. ACT provided a comprehensive white glove service that covered every aspect of the project–from initial design to final installation. This process was further enhanced by the involvement of OneScreen's integration specialists, who brought their expertise to bear at each stage of the project.

A critical part of the installation process involved close coordination with both the architect and the builder to ensure that all technical requirements were met without compromising the overall design and functionality of the space. This included precise planning and positioning of power receptacles and wiring boxes to accommodate the specific needs of the video wall. By aligning the installation with the broader architectural vision, the team ensured that the video wall not only served as a state-of-the-art educational tool but also integrated harmoniously with the aesthetic and functional goals of the classroom and amphitheater.



Dr. Smith's Insights

Dr. David Smith, IT Director of Tustin Unified School District, shared his thoughts on the project: "The point for the video wall integration was for it to be installed as a backdrop in the amphitheater space. This space is where students congregate and have stage performances, and now they can enhance performances in a dynamic way" and utilize the video wall with multimedia integration.

He also emphasized the practical considerations: "Since the amphitheater seating is outdoors, the video wall also had to be able to withstand the elements of moisture, wind, temperature, and ambient light. This made the selection process even more difficult, but the OneScreen solution checked all of our boxes." He concluded with pride, "At the end of the day, we may not look like a public school, but we are. We did our research and we went with a low cost, high quality product that I would be happy to stand up against any major brand. It is an outstanding video wall and when people see it, they are amazed and it achieves our goal of creating the best possible learning environment for our students."

Impact & Benefits

Since the installation, the video wall has significantly enhanced the learning environment at the Legacy Academy. The vibrant and high-resolution display has captivated students, making lessons more engaging and interactive. Teachers have praised the ease of use and connectivity features, allowing them to seamlessly integrate multimedia content into their curriculum. The durability of the OneScreen video wall has also been a standout feature, withstanding the varied indoor and outdoor conditions without compromising performance.

Conclusion

The video wall project at Tustin Unified School District's Legacy Academy, facilitated by Advanced Classroom Technologies, stands as a testament to the transformative power of innovative educational technology. This project underscores ACT's expertise in delivering tailored solutions that align with the vision and objectives of educational institutions.

