

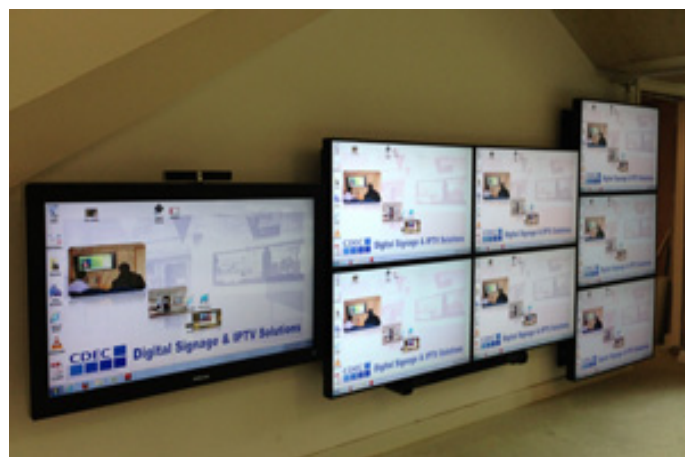
Case Study

Datapath provide school of thought at Sussex academies

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x4 controllers deliver the brains behind video wall and immersive learning space

Two schools in Sussex, the Hastings Academy and the St Leonards Academy, known collectively as HASLA (Hastings and St Leonards Academies), have been redeveloped recently with AV at the core of a directive to deliver innovative new schools with 21st century facilities. Among the technologies deployed to fulfil this aim are eight Datapath x4 multi-screen controllers (four in each academy), which perform a number of impressive functions.

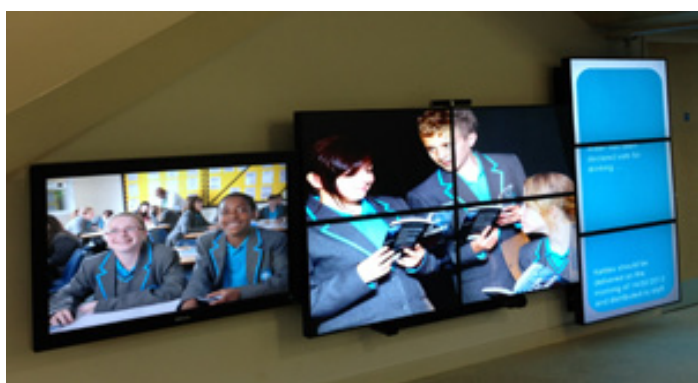


HASLA represents innovative new schools with first class facilities, skilled staff and an exciting new way of teaching that will help every student meet their potential. The key aspect of the two academies is that they work closely together under the same governing body, enabling them to collaborate and share ideas.

Wall-to-wall innovation

The centrepiece of the recent redevelopments is an interactive video wall solution featuring live video conferencing that offers a 'window' to the other partner academy. Alongside this sits an interactive screen for sharing best practice and a live Twitter wall. Elsewhere in the academies, an immersive 270° projection system has been constructed as part of a Creative Learning Centre.

Orpington-based AV specialist, CDEC Ltd, was tasked with turning the original vision into reality. For the video walls, CDEC specified a system comprising four Samsung SM460 display screens controlled by a single Datapath x4 multi-screen controller. Two co-located, stand-alone Samsung screens are used for video conferencing and live Twitter feed functions.



Number one choice

"We chose Datapath based on a number of criteria," explains Jack Wilders, Technical Sales Manager at CDEC. "First and most important, and why we select most products that we specify into education, is the support network/process in place. Another compelling reason for using these units is their flexibility with regards to configuration, and how well they work in tandem with OneLAN digital signage/media players, which again provide a high level of flexibility and user friendliness for the education marketplace. The third reason is the cost effectiveness of the x4 controller – many competitor products command a much higher price and offer little or no additional functionality."

The Datapath x4 is a stand alone display wall controller that accepts a standard single or dual-link DVI input which can be displayed flexibly across four output monitors. Each output can represent an arbitrary crop region of the original input image. The output resolution and frame rate does not need to be related to that of the input, as the Datapath x4 display controller will optionally upscale and frame rate convert each cropped region independently. Each output monitor can take its input from any region of the DVI image, since all the required cropping, scaling, rotation and frame rate conversion is handled by the x4 hardware.

Digital window

The video wall systems at HASLA also deploy a Kramer VS1616D HDMI matrix switch to enable seamless shifting between content, networked through a OneLAN NTB6000 digital signage player. This offers the capability to display several inputs and to simplify the digital 'window' for both students and teachers.



Another innovative feature is a timed video conferencing system, which turns on automatically at the end of lessons at 3:15 PM so that pupils and teachers attending after-school clubs can use the video wall to share lessons and best practice with the other academy in an interactive meeting space. Furthermore, an Infocus Mondopad collaborative LED touch display with integral video conferencing codec allows content to be commented on and added to while the session is underway. An additional Samsung display is switched to portrait mode and displays a live academy Twitter feed, with tweets from teachers and the school itself.

Immersive learning space

The teaching facilities at the academies also include Creative Learning Centres, which feature a cutting edge immersive learning space with 270° projection, innovative classroom technology and digital signage solution throughout the building which can be updated with both centralised and area-specific content. Three Datapath x4 controllers manage the way content is cut (hard edge blended) and sent to the projectors to create the effects seen on seven Samsung SM460 screens. Again, the system is driven by a OneLan NTB6000 media player.

"This is one of the most useable immersive systems around," says Mr Wilders. "We have created a number of templates – and with the simplicity of the system to update and create different immersive backdrops, the web team at the school are constantly adding to the templates to create different immersive environments. The teacher arrives with an iPad and selects different options via a dropdown box and the room is transformed into a desert, for example, then changes again to a moonscape, and so on."

CDEC worked on the project for over two years from concept and tender stage through to completion and handover in 2013. The company collaborated with the ICT team at HASLA to specify and install over 250 pieces of equipment.

