

Re-imagining classrooms

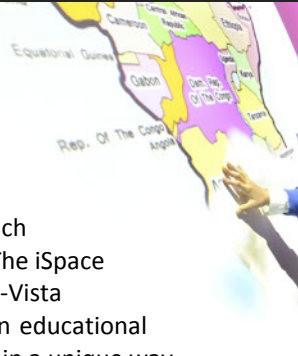
Kingwood City Learning Centre

The Kingwood City Learning Centre in the London Borough of Hammersmith and Fulham has created an interactive learning environment that inspires and motivates students to approach learning in new and creative ways. The iSpace uses a combination of several OMi-Vista interactive technologies to deliver an educational experience that personalises learning in a unique way.

"It is an opportunity to change the way we teach, to give children a variety of learning experiences." enthused Katherine Douglas, Director of Kingwood City Learning Centre in Fulham.

"Interactive whiteboards didn't change the way we teach within a space — that is still teaching in a traditional mode with access to tools that support the teacher. If you have a room without furniture, with projection onto the floor you instantly get a completely different dynamic." she explained when talking about iSpace, an approach to creating a classroom that challenges much of our current understanding of just what that place should be.

The iSpace room is a large, irregular quadrilateral with one curved wall, all of which is painted white. White blinds keep out the daylight and the nearest thing to furniture is the two long benches built into opposite walls that serve as both seats and storage. Although stripped of the recognisable qualities of a classroom the OMi technologies within it, which are all unobtrusive and discretely placed, enhance the learning that happens in it rather than distract from it. There are colourwash lights; co-ordinated projection systems that can fill an entire wall; surround-sound; devices that respond to movement to create music; and others that work with CCTV cameras to take the user into the centre of the virtual experience.





Katherine, who has hosted lessons with pupils of all ages and abilities across many curriculum areas, believes the iSpace opens up a myriad of creative possibilities: "In a way you can do anything you want in here. It is a space where you get that sense of being freer and more experimental."

Kingwood is making the most of the opportunities the iSpace provides to deliver the curriculum more creatively. With an IT Diploma group the school has based a project on a real-life scenario - creating an advertising game for a bookshop using OMi-Vista, a system that projects images onto the floor for players to interact with; their movements picked up by an integral movement tracking camera. The brief was to build an activity for a bookshop for that would entertain young children whilst their parents shopped. The students had to gather suitable content then create something that would both engage the target audience and work as a promotional tool.

"Getting kids to understand audience and purpose is one of the most challenging things for us in our teaching," explained Katherine, who believes that using this system is particularly effective for developing the necessary empathy. "OMi technologies are good at creating scenarios that immediately show how it impacts. You are kind of inside the technology and can see it as a user, not as an observer."

Shifting perceptions is one of the underpinning purposes of the room. "If you want teachers to change practice you have to put them in touch with what that technology does. Take them into that space and see it as kids do." Katherine continued. Which is how Lizann O'Connor, a Senior Teaching and Learning Advisor for Hammersmith and Fulham, and her colleague Jenny Crellin, Primary ICT Curriculum Lead, approached their teacher training session on ICT in English, part of which was spent in the iSpace.

The day focused on developing creativity. Jenny showed a scene from the film *Mary Poppins* where the lead characters jump into a chalk drawing on the pavement and enter another world. "There is a unit set in imaginary worlds. Some of the students really struggle with that," she explained, as the participating teachers gathered around the floor projection. "You could do this with posters on the floor, but I think this would be

much more effective." There was general agreement as an image of the savannah appeared, and people swept their feet over it, revealing animals beneath. The image changed to one of penguins swimming under ice, where each step on the projection caused cracks to appear. As a crisp image of the moon reflected in a pond appeared there was a, "Wow" from someone, before those around the edge begin to dip their toes to cause ripples across the surface.

The group also experimented with OMi-Reflex, a system that combines projection and control through a pair of cameras to combine the user's image with another graphic and project it onto the wall. A simple adjustment can give the impression of the user hanging from the ceiling, or their actions may wipe away one image to show another, which could be used to introduce scenarios such as an entry into another world and help develop creative, imaginative projects.

The training session also included time trying out OMi-Beam, which projects coloured beams onto the floor to create coloured dots, which trigger a response when either broken or reflected back. The responses range from a straightforward sound, such as a drum being hit, to a user-created, sampled loop, all combined with images and film projected onto the wall. Users can collaborate to play the drums or improvise music with a unique background video.

To help alleviate any anxiety some teachers may have about teaching in such a space Katherine connected the technologies to current practice. "We use OMi-Vista as a way of showing that it is not so far away from a more traditional approach. In a chalk-based classroom you may be growing a narrative or poem from an impetus. Using the moon image with the ripples you can take children out and give them that experience. Walk on the ice and it cracks. No one in their right mind would do that for real. We use virtual experiences that will broaden their thinking."

She can see plenty of potential for learning right across the curriculum, with plans for students to interact with their own self portraits, or dancers creating responsive scenery, and those studying languages physically making connections between words and concepts. She





believes that using such technologies provides something that can prove elusive. "It is the awe and wonder element you are constantly trying to get hold of."

It is an experience that is appreciated by many of the students, as Mohamed in Year 10 at a local school reflected after his visit, "It was like we was in another world, and I loved that," and it had opened up his thinking to wider use. "I think my mum can have a go as well. It's not just for kids, it's for everyone."

You can find out more about the Kingwood City Learning Centre iSpace on their website: <http://www.kingwoodclc.net/>

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