

Laboratory case study

St Martin's School Caerphilly, Wales

Contractor |
Timescale |
Architect |

Innova Design Solutions
3 weeks on site
Innova Design Solutions



As part of the Welsh Assembly Challenge Cymru Pathways to Success Schools Programme, St Martin's School in Caerphilly was one of the Welsh schools requiring more inspiring facilities to help students from disadvantaged backgrounds reach their potential.

With a new head at the helm and a focus on improving attainment, Innova worked with the school to transform a music room into a brand new lab for mixed sciences.



Brief

St Martin's were looking to refurbish what was previously a music room and transform it into a spacious, state-of-the-art science classroom fit for chemistry, physics and biology in a bid to boost pupils' performance with an improved environment.

The school managed the project independently without enlisting the help of the local authority for the very first time.

Education interior specialist Innova Design Solutions was briefed with creating a laboratory for mixed sciences, designed to accommodate 30-32 pupils.

The biggest initial challenge to overcome was the fact that the former music room was severely lacking in the key services. So in order to transform the space into a versatile science classroom, the room required extensive M&E works to supply and connect water, electrics and gas as well as the installation of extraction for fume cupboards.

Working in line with the new headteacher, bursar and site manager, the school's vision was incorporated into the plans and a full turnkey solution was delivered, creating a flexible, first-class learning environment that would maximise space, improve circulation and shorten the lines of communication to facilitate 21st Century teaching and learning.



Carcase		Manufactured from 18mm MF MDF	Seating		Ergonomic stools
Worktops		Trespa Toplab Base	Handles		Zinc alloy inset handles
Edging		ABS Colour matched edging	Hinge		240° pivot safety hinges

“ Creating a science lab that works for chemistry, physics and biology requires real ingenuity ... this range of contradictory requirements has been delivered seamlessly in one space. ”

Lee Jarvis, Headteacher



Solution

The original music room was small and narrow, which meant the design would have been compromised and the desired wow factor hampered. With this in mind, a smaller room used to store keyboards within the main classroom was knocked down, increasing the space by at least 30 per cent.

Tall cupboards, gratnell trays and under desk storage were installed, which meant clutter would be kept to a minimum. This has helped to improve student concentration levels as well as enable staff to assemble and prepare for practical lessons with ease.

To minimise distractions, gas and electric outlets were installed on the front face of the bench with easy accessibility when required.

The school was keen to move away from the traditional classroom design with rows of benches. Innova's wing layout met the need for a working classroom and practical laboratory in one. With a modern, stylish desk space and optimised circulation space for the teacher, the layout facilitates the switch from practical to theory with minimum disruption. This level of versatility enables total flexibility in lesson planning and inspirational practical sessions can take place as often as desired.