Case Study: Hamstead Hall

Hamstead Hall Academy, Birmingham has taken full advantage of Casio's latest educational solutions by integrating the One-Click Connect feature into creative and forward-thinking maths lessons.

We visited the secondary school to speak with students and staff to find out how our technology was being utilised to support the school's curriculum. Over the summer, an the XJ-F211, part of our latest Educational Solutions Series, was installed in a maths classroom and is supporting effective lesson plans, creating a more participatory and interactive classroom dynamic.

IT Technician Derick explains why he encourages the school to switch to Casio: *"It makes sense to go lamp free, because over five years or so, it's cheaper. For a long time, there was a massive premium for lamp free projectors but that price has come down now. You're getting more for your money, more functions, a brighter image for the same or less."* The school has had issues in the past with conventional lamp projectors, such as dimming bulbs, poor image quality and blown lamps. *"Some projectors can die in a year because nobody's switched them off".* Derick concludes *"By my counts, Casio projectors are remarkably reliable."*

Key features

- Lamp-free
- Up to 3,500 ANSI lumens
- 1.5 x optical zoom
- XGA and WXGA resolution
- 2 x HDMI composite connectivity
- Powered USB
- Quick start and stop
- Eco-friendly low power consumption
- RS-232C
- LAN and WLAN connectivity
- Audio IN / OUT
- Crestron Roomview Express®

When it comes to classroom management, it was clear that saving time is a priority of staff as well as students, and that effective classroom technology needs to support this aim. When we spoke with Rahul, a year 13 student, he described the frustrations that unreliable projectors can cause: *"Sometimes we have to move room because of a faulty projector which eats into lesson time."* He explains that it often takes a long time for the teacher to set up the projector and navigate to the content they need to support the lesson. A fast set up means the lesson can get underway quickly. Rahul gives the new Casio his stamp of approval: *"This projector is simple for teachers as it's wireless".*
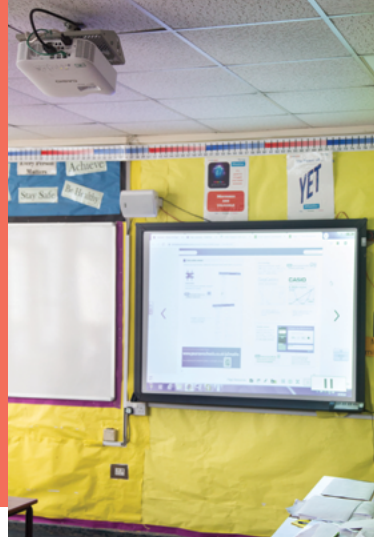
We spoke to Executive Principal Jonathan Mortimer about the school's overall strategy when it comes to education technology procurement. *"We used action-based research. We try new technologies out and if it's enhancing lessons, producing a benefit and we can identify key transferable aspects, then we upscale. However, technology doesn't automatically make lessons more effective, it's about how you use it and how you deploy other resources."*

When we asked Rahul about the sorts of benefits technology brings to lessons, he said: *"Tech makes lessons more engaging and lets students go at their own pace. Lessons where the teacher teaches from the front of the class means they set the pace, but when we use*

LampFree
CASIO Green Technology

CASIO®

the laptops, we can go at our own pace. Teachers sometimes get us to research things independently if the book isn't clear. I like it as there's a lot more you can do with technology, and it gets you taking part, being more proactive".

At Hamstead Hall, Head of Maths Melios Michael uses the new projector alongside laptops which are shared between pairs of students. Using emulators of Casio graphic calculators, students can work through problems on their laptops whilst sharing their workings and answers with the rest of the class. The split screen function is used to compare different answers and the teacher can select one laptop to zoom into, with the student working through the problem on the emulator in real time.

When we asked Melios if he thought the new projector was generating more classroom engagement, he said *"it's engaging because it's different"*. He told us that the teaching community shouldn't focus on engagement alone, but on generating the right kind of interaction. Jonathan echoes this, citing the interactive whiteboard as an example. He describes the relationship between technology and engagement: *"Interactive whiteboards used to provide excitement, a wow factor, but now they're quite everyday. But use resources effectively, and you can bring the lesson to life".*

Melios comments: *"You don't just want to be running after captivating students all the time. It's about making those lessons more effective and interacting with students to form a good working relationship is how you do that."*

Melios describes how technology can go beyond merely creating engagement and create a positive working relationship. *"In a tuition context, you can just watch what students are doing on the paper and interact with them that way. But when you have a class of 30, you can't watch what they're all doing. Having something where you can share screens at the click of a button quickly and smoothly really helps achieve this."*

Rahul makes the point that being able to share content to the projector can help to create a more inclusive classroom environment. *"It's good to be able to share your screen from your seat. When you're at the front of the class, there's a lot of pressure and you're on the spot. Being able to screen share means you don't have to go to the front of the class and deal with the anxiety of that."*

Melios agrees: *"Students feel more comfortable sharing from their seat, even if they're speaking to the whole group, they feel more at ease doing if from there, rather than coming up to the front of the class."*

He said that although technology can be used to get through the curriculum faster, this isn't the whole picture. *"What's key is making sure students thoroughly understand the content. That comes through investigation and through interaction with the students, to make sure they don't have any misconceptions. That sometimes happens through dialogue and conversation, but sometimes it comes through watching how they work, sharing their methods and supporting this."*

"Working through problems at the front of the class on a whiteboard is effective, but requires a lot of confidence and students sometimes worry about being selected. Under that pressure, they tend not to work out the problem in the way they'd do it naturally. But when students are being asked to share their work with just a simple click, nearly everyone is up for it and the students can watch, interested in what they do naturally."

Melios concludes, *"the technology simply allows us to interact with the students better."*

projectors.casio.co.uk

LampFree
CASIO Green Technology

CASIO