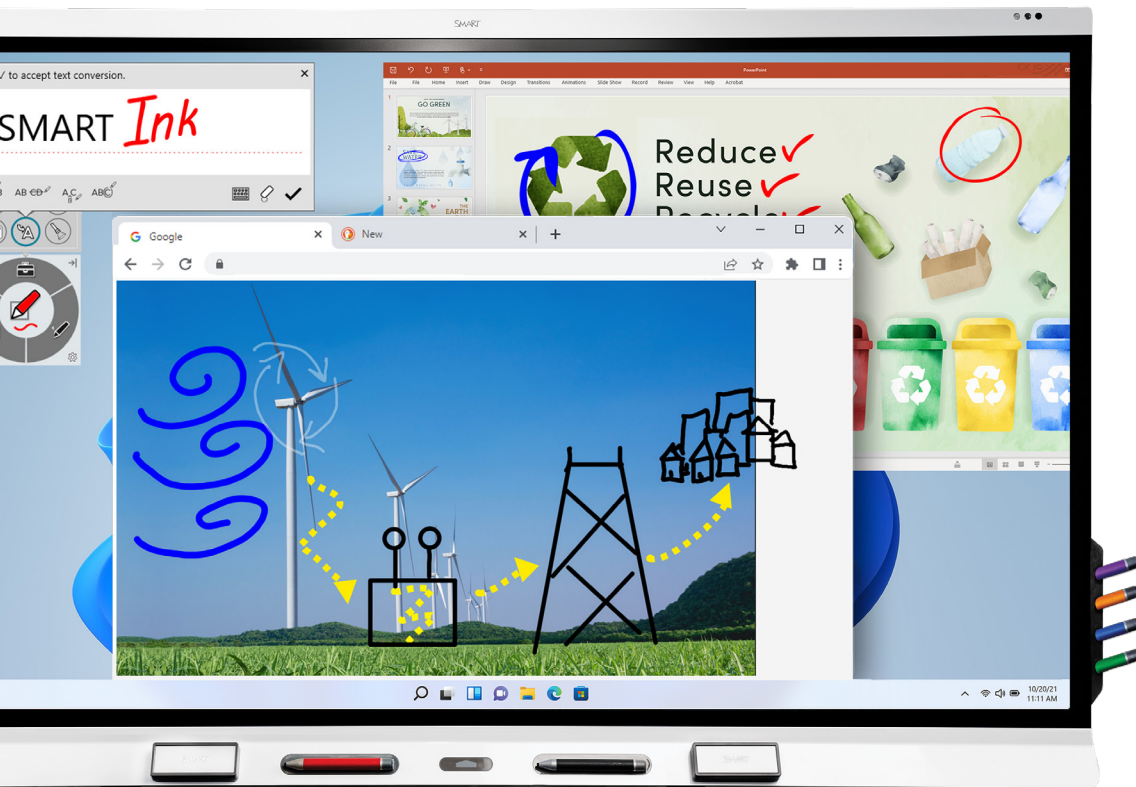


SMART®

Sustainability in EdTech

Bett 2023; Roundtable Report





In March 2023, Bett welcomed EdTech providers, IT decision makers, MAT leaders and teaching staff to showcase and explore the latest education technologies, and discuss the most pressing subjects for schools. SMART Technologies convened a round table discussion from five different countries to discuss sustainability in education and specifically, EdTech.

The importance of sustainability and longevity was unanimously agreed upon. Education leaders expressed their thoughts on the importance of selecting sustainable school solutions due to myriad reasons such as manufacturing processes, shipping, packaging, energy consumption, and long-term ROI.

While sustainability was always a discussion point for schools, we're now seeing the crisis fuel decision-making, as IT departments and school leaders look to cut their costs and seek more sustainable choices. So, how can we, as school supporters, effectively deliver sustainability in schools? Let's dive into factors that education leaders are considering.



Cost as a barrier for change

“ A lot of it is cost driven. We know that those targets are coming, but we have no chance of hitting them anyway. ”

Round Table Participant
Education Success Manager

Given the UK's energy crisis, it's no wonder that cost is a factor. Academy leaders, IT decision makers and teachers present at SMART's Sustainability Round Table at Bett 2023, all acknowledged that energy cost is the real factor driving sustainability in schools at present. Energy is the second biggest cost for schools—after wages—with some schools spending around £630m a year. An academy leader in attendance at the roundtable noted gas as the biggest issue, costing approximately 20-30% across the entire district. He noted that without more funding, the situation is “impossible”.

Faced with high energy prices, schools continue to brace themselves for considerable financial impact. In fact, new survey data from the school leaders' union NAHT found that one in six headteachers expect their energy bills to treble over the next year. The survey also revealed that 99% of headteachers expect their schools' energy costs to increase over the next year.

Along with energy cost, there's the cost to replace and update school infrastructure like gas boilers, air filtration, heat pumps and low efficiency lighting; which includes significant capital costs. As well, electricity is significantly more expensive than gas so working to upgrade older technology will only increase your overall energy cost.

Another attendee added that 'net zero' is continuously raised as a focus point, however it has not been as far up on the agenda, as costs have taken priority. One IT-decision maker went on to say that cost is now the greatest factor in driving sustainability—escalating the urgent need for modernisation, efficiency and more sustainable investments in schools.

It's clear that as a result of the energy crisis, the need to accelerate sustainability in schools is critical. The real question is how to accelerate it.



Reducing carbon emissions and the path to net zero

“That’s the problem that schools have got, they’ve inherited old buildings. The cost of redoing all of that... it’s going to be a long time before we see that money come back.”

Round Table Participant
EdTech Integrator

An education leader present at SMART’s roundtable noted that throughout their 32 schools, they’ve rolled out a carbon reduction plan across the estate, making significant strides with reducing their carbon emissions, principally because they are buying green electricity. They have considered behavioral changes, physical measures like LEDs, energy efficient devices. But, the biggest challenge getting in the way of achieving net zero is gas. This leader mentioned that without funding, schools aiming to reach net zero is an impossible task.

Another academy leader raised the need for more efficient, modern buildings as a starting point. He acknowledged that while the DfE has provided newer schools with funding to modernise and improve, older schools remain miles behind in their sustainability journey.

He alludes to the DfE’s sustainability and climate change strategy which outlined that all new school buildings will become net zero in operation from this year. They will also be implementing retrofits (including LED lighting, insulation, eco heating and cooling systems) and increasing biodiversity as part of plans to make buildings more sustainable.

However, current and older school buildings remain inefficient and simply need more attention and funding to be able to transform and become more carbon and energy efficient in the same way that newer schools are.

Another guest added that it remains a central government issue to resolve.

Still, for all education estates to become net zero in operation, it will require schools to review every corner of their buildings to make efficiencies. And, ICT will be an important element of that.

Schools and trusts must reevaluate their practices and ask themselves whether their current ICT strategy is designed for longevity and energy efficiency. The only way to assess this accurately is for schools to measure it themselves and consider how much carbon is generated per pupil. They must then compare their technology with other energy-efficient interactive displays and look to low energy computing.

Unfortunately, education leaders are concerned for their bills and cost is still a driver in energy usage. Net zero and decreasing ones carbon footprint takes a back seat.



Bolstering climate change education

“ Maybe there could be more in the curriculum to push that agenda more.

Perhaps that could drive children to understanding it and thinking about their consumption of electricity at home. ”

Round Table Participant
EdTech Safety Officer

Education is critical to fighting climate change. Young people—Generations Z and alpha—are more concerned about climate change and its effects on the planet than any other generation. As a result, educators have a huge responsibility in preparing young people for a changing world—ensuring they understand the climate situation and are well equipped with the right knowledge and skills to make a difference.

During our roundtable, a teacher explained that school communities do genuinely care about sustainability. She added that teachers are already incorporating games and activities, such as “how low can you go” challenges, into the curriculum that encourage children to understand their role in protecting the planet. However, she admitted that there does need to be more tangible action when it comes to developing sustainability in the curriculum for there to be a real impact.

Bolstering the curriculum, and arming teachers with the training and resources needed to teach about climate issues will be key. According to the DfE’s paper, to achieve a well-rounded education on climate issues, it will be providing teachers with the necessary training and support.

Alongside this training, teachers should look to incorporate activities and resources that visualise the issue to children and empower young people to take accountability and make positive changes to improve the planet. There are already brilliant resources out there that can support teachers, including Lumio’s, which provides ready-made instructional resources that support environmental education to increase pupil’s understanding and readiness for the UK’s green economy.

A teacher present at the roundtable also added that while school communities are happy to support, and do their part in driving this change, cost remains an issue. Her school has encouraged pupils and parents to take the bus to school, instead of driving, however travel remains expensive and bus fares in some areas of the UK come to around £600 a year per pupil—something not all families have the privilege to fund, particularly amid the difficult cost of living crisis. Therefore, activities must take these considerations into account. Schools in the UK have taken part in Sustainability Week to build awareness and encourage students and community members to think critically about sustainability in our daily lives.



Reducing energy consumption —turn it off!

“ We have tried to do information campaigns, we have tried to raise awareness... but it is also about monitoring and measuring.

50% of our energy consumption is outside of our school hours. There must be something we can do to reduce that consumption.”

Round Table Participant
EdTech Safety Officer

Along with educating students and community members, it's important that staff, teachers and educators are aware of it as well. The roundtable discussion also underlined the need for schools to go back to basics when they think about reducing waste and energy consumption. All attendees noted that schools are constantly using photocopiers, and leaving projectors and computers running when not in use. And while paper usage has been reduced through greater use of technology, technology does use significant amounts of energy, leading to high bills as a result.

At present, most schools can be guilty of leaving all their devices either running or on standby throughout the whole school week, when they could instead, be powered off when not in use.

It's really that simple sometimes—and turning the lights, projectors and computers OFF makes a huge difference to energy consumption, and bills. We learnt that having these reminders and a checklist for schools could be all the difference in driving these behaviours.

To conclude, amid the ongoing energy crisis and global climate emergency, it's more important than ever that schools have access to technology that's sustainable, from both an environmental and budgetary perspective. The roundtable raised some important issues around boosting funding to transform efficiencies in schools, bolstering curriculums to empower students to take action, as well as reducing waste and encouraging better habits.

SMART is leading the way for sustainable edtech, with displays designed with fully recyclable materials and a smaller packaging footprint—the smallest in the market. As a sustainable vendor, the SMART Board MX-V4 series is built with fully renewable energy. Beyond that, SMART interactive panels can save up to 52% on energy costs and use 50% less energy on average, when compared to other panels available on the market. Turning to technology with sustainability and longevity at its core, schools can be supported in reaching their sustainability goals, reducing costs amid the ongoing energy crisis, and teaching pupils about their social and environmental responsibility to the planet.



Evaluating your sustainability successes

But, how do we know if we're doing the right things in terms of sustainability and energy usage? While there isn't an equation for how to become a sustainable school, educators noted things they can do to analyze their efforts.

One school representative noted that they measure printing services and the possibility of reporting on energy consumption can be useful when looking to solve behavioural habits.

SMART 6000S Interactive Displays come equipped with usage reports that track the time spent on, using the display and asleep. They are also equipped with sensors that can measure temperature, carbon dioxide levels and other harmful substances in a classroom.

One educator noted that "what gets measured, gets done." They created information campaigns to raise awareness,

Measuring your initiatives will only help to motivate schools to keep going and look for other opportunities to reduce emissions and energy usage.



The change makers

It's no surprise that sustainability is important for schools and districts. These considerations will be critical when implementing tech, physical and behavioural measures to decrease energy usage and carbon emissions.

For more information on how SMART is manufacturing and distributing sustainable products for education, explore our [Environmental Promise](#).