

BMS Appraisals and Building Environmental Performance

CUSTOMER

**11 academies within
a multi-academy trust**

BRIEF

**Review of BMS and
plant performance**

OUTCOMES

**More comfortable
conditions and up to
16% in energy savings
(£28,000 per annum)**

THE CHALLENGE

The Estates Director at a large Academy group of mostly modern schools was concerned that the buildings were not meeting the required standards of control and performance. Concept was commissioned to carry out an assessment of 11 of their academies across the country. The overall requirement was two-fold: ►

We understand the importance of the effective control of plant and equipment and our consultant team includes several with extensive Building Management System (BMS) experience and expertise. We are able to undertake assessments and audits of BMS installations to ensure that performance of a building is optimised and that the control strategy is appropriate for the building.



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- First, to carry out a thorough review of the installed building management system (BMS) at each academy and confirm that it was operating correctly in relation to its original control strategy (plus any subsequent building/plant modifications).
- Secondly, to review plant performance (in terms of control) and ensure that the building was meeting environmental design objectives, particularly in relation to current Building Regulations (Part F) and Building Bulletin 101 – Ventilation of School Buildings.



“Immediate savings of over 16% (£28,000) per annum were achievable, with minimum outlay.”

IMPLEMENTATION

The study at each academy involved a full site survey to understand first the current operation of the building, then time was spent reviewing the BMS with input from the site's BMS contractor where appropriate.

The output from the assessments was a report setting out the findings, with recommendations for improvements or corrective actions where necessary.

BENEFITS

While the immediate driver was to ensure satisfactory environmental conditions for students and staff, the additional benefits came from energy savings which were calculated for all the measures recommended and which varied across the schools from a minimum of 6% to the worst performing academy where immediate savings of over 16% (£28,000 per annum) were achievable, with minimal outlay.

NEXT STEPS

When the reports had been presented and approved, the next step has been to work with each of the BMS contractors to implement the recommendations and ensure that the predicted levels of savings are achieved, with periodic follow-up monitoring.