

An Educool system has recently been installed in classrooms at Boxford Primary School in Suffolk.

The school's first floor classrooms were unusable during afternoons in the summer term, due to excessive solar gain and natural latent heat build up.

During these summer months the children were taken outside to the playing field for afternoon lessons.



To overcome this problem an Educool system was designed, and installed during a holiday break.

The upstairs classrooms are fed with fresh, filtered and cooled external air from the large ceiling void above, via ceiling diffusers, creating a pleasant, comfortable teaching environment.

Using open windows as natural extract, the rooms purge with a continuous pressurised supply of cold fresh air, dropping previously recorded temperatures in excess of 35 to 40 degrees to a pleasant 22 to 25 degrees centigrade.

In manual operation there are five fan speeds and the option of pure ventilation or natural cooling. In automatic mode a thermostat controls the operation of the cooler to achieve a set classroom temperature. This results in the cooler mainly running at around speed 2 to 3, with the cooling section only operational in the summer months.

An inline damper and second duct feed provide fresh air to ground floor classrooms as the cooler capacity by far exceeds the 8 to 12 air changes per hour required to keep the building cool. Head teacher Rob Giles and his staff have noted a marked improvement, not only in the ambient conditions, but also in the children's well-being, attentiveness and alertness during their afternoon lessons.

