

Education unions raise ventilation alarm

3 years ago



Six trade unions have urged the government to find more money to help schools tackle growing indoor air quality (IAQ) problems.

In a joint statement, the ASCL, GMB, NAHT, NASUWT, NEU and UNISON all expressed alarm at the extent of the air quality crisis in school buildings exposed by the wider use of CO₂ monitors. They said schools could not afford to pay for mitigation measures and central government should intervene.

The government has spent £25m on supplying CO_2 monitors and has pledged to supply 7,000 air purifiers for classrooms, but the unions agreed this was totally inadequate to address the scale of the growing air quality crisis.

Dr Mary Bousted, joint general secretary of the National Education Union (NEU), pointed out that there were more than 300,000 classrooms in England, so the number of purifiers offered by the government was only a token gesture.

"Seven thousand more air purifiers is something, but it is completely inadequate for what should be a basic human right, the provision of clean air in every classroom," she said. "The fact that the Government has provided the extra purifiers shows that it recognises the problem but with over 300,000 classrooms in England it has failed to provide an effective solution."

Rhetoric

The unions are concerned that there will be further disruption to children's education unless the IAQ problem is addressed and accused the government of offering rhetoric rather than solutions.

The NEU also reported on social media that 58% of its teacher members said they did not have regular



access to a CO₂ monitor and, of those who do, 13% said readings in their classrooms were regularly over 1,500 parts per million (ppm) and 32% said they were over 1,200ppm.

The union said the government should carry out its own survey because "these levels indicate poor ventilation rates and make viral transmission and education disruption more likely". The government's own guidance is that all settings should have access to CO_2 monitors and the ventilation should be able to keep CO_2 below 800ppm in all occupied classrooms.

The Building Engineering Services Association (BESA), which represents ventilation providers and air quality experts, said there were a wide range of low-cost mechanical solutions available that could help schools take control of their air quality.

"The government has a much better grasp of the extent of the problem thanks to the deployment of air quality monitors, but simply raising awareness of CO₂ levels only goes so far," said the Association's head of technical Graeme Fox.

"Opening windows can help, but only to a limited extent as it does not provide complete ventilation of the indoor space. It can also create other problems including bringing outdoor pollution into the classroom and increasing background noise if the school is located close to a main road," he added.

The government-funded air cleaning units are being provided to schools and colleges with specialist needs and others are being directed towards an online 'marketplace' where they can purchase others. This was described as "simply not good enough" by the unions, who called for a concerted programme of public funding to avoid another year of exam cancellations and disrupted schooling.

Nathan Wood, whose firm Farmwood Ventilation works with a number of schools to address IAQ problems, said it was important that head teachers were given access to expert advice.

"2021 was a breakthrough year for building ventilation because the pandemic increased the focus on how viruses are transmitted through the air," he said. "Our industry has been aware of this threat to children's health for many years, but now everyone is talking about it, and we finally have a great opportunity to address it properly.

"Many of the solutions are relatively straightforward and inexpensive, but every building is different so must be addressed individually. There are also a lot of 'snake oil' salesmen out there who are jumping on the bandwagon and offering 'miracle' air purification solutions that do not work.

"So, I would urge head teachers to approach local ventilation firms and ask them to survey their building before they do anything else," added Wood, who is also chair of BESA's Health & Well-being in Buildings group.

BESA also described as "unhelpful" a story that appeared in this week's Sunday Times, which suggested CO_2 levels of 1,500ppm in classrooms was "reasonable". The article promoted the concept of using natural ventilation alone to provide adequate IAQ, but the Association pointed out that such a high level of CO_2 would also indicate wider problems.

"1,500 ppm is almost double the government's recommended maximum and high CO₂ is a clear indicator



that the ventilation rate in the room is not adequate to support good learning conditions and protect health," the Association said.

"Natural ventilation will play a part, but it cannot provide a complete solution and does not allow full control over the amount and direction of air in the space. It also cannot provide air filtration, which is necessary for buildings close to main roads and in other areas of high pollution."

For more information go to: www.theBESA.com/iaq

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