

National Audit Office Examination of the School Estate

Response of the Association of School and College Leaders

A. Introduction

1. The Association of School and College Leaders (ASCL) represents over 23,000 education system leaders, heads, principals, deputies, vice-principals, assistant heads, business managers and other senior staff of state-funded and independent schools and colleges throughout the UK. ASCL members are responsible for the education of more than four million children and young people across primary, secondary, post-16 and specialist education. This places the association in a strong position to consider this issue from the viewpoint of the leaders of schools and colleges of all types.
2. ASCL welcomes the opportunity to contribute to this consultation.

B. Key points

3. ASCL is a member representative organisation, not a responsible body for the purposes of defining our context in response to this study.
4. The government's latest evidence base available in the public domain is the May 2021 Condition of School Buildings Survey (based on data from 2017 – 2019). This report states that, of the teaching blocks still being used in the school estate, the 1960s is the decade with the largest representation in terms of floor area. 23% of the estate's condition need is in blocks from the 1960s, making it the highest source of condition need, followed by the two decades either side. The 1960s sees the peak of condition need per m2 and condition need per block. Condition need per m2 then falls every decade through to 2020. Condition need per block rises slightly in the 2000s compared to the 1990s. Schools from before 1900 have a condition need per block less than half of the peak, and a condition need per m2 similar to the 1980s, suggesting that these buildings are in excellent condition for their age.
5. ASCL welcomed the governments school rebuilding programme, with its intention to rebuild and refurbish 500 schools and sixth form colleges in England. However, based on the Department for Education's own reports, we do not believe that the programme goes far enough in meeting the overall requirements for fundamental repairs and refurbishments. We believe that the government needs to develop a more strategic and sustainable approach to maintaining the school and college estate, and take a less disparate approach to capital funding.
6. ASCL believes that the funding available through devolved formula capital allocations is insufficient to meet the intended function, and that the current distribution methodology does not accurately reflect condition. The lack of coherence between different strands of schools' capital also represents a barrier to keeping some schools in a condition deemed fit for purpose. For example, the DFC allocation may be significantly below the minimum threshold for applying for condition improvement funding (CIF).

7. Children and young people's education has already been severely impacted by the Covid-19 pandemic. Implementing a sustainable plan that addresses the building and fabric condition issues will help to minimise further disruption.
8. The Prime Minister has pledged £1.5 billion to fund a decade-long school rebuilding and repair programme. Based on the impact of large fires alone, commercial education insurance provider Zurich estimates that the repair for school fires could hit £320 million over 10 years – a significant portion of the government's planned investment.
9. The £1.5 billion funding pledge is also not enough to cover the highest condition need of 'electrical services', for which the Department for Education's most recent report identifies an investment of £2.5 billion is required to fully repair or replace just this single element of building condition.
10. The Department for Education's May 2021 [Condition of School Buildings Survey](#) found that it would cost £11.4 billion to repair or replace all defective elements in the school estate. The highest need area is electrics (needing £2.5 billion), followed by items such as boilers and pipework, and then external walls, windows, doors, and roofs (needing £1.5 billion). It is completely unacceptable that children, young people and staff are working in learning environments that are not of a satisfactory condition. This means that many children and staff are learning and working in buildings which are not a conducive environment for education, and that schools face considerable ongoing costs for routine maintenance.
11. Circa 60% of the school estate was built pre-1976. Many schools will have had multiple small and large retrofits and will not have been built to modern building standards and guidelines. There will be variation in lighting systems, window types and ventilation systems.
12. The DfE [Annual Report and Accounts 2021/22](#) include building condition as a significant risk. The report states "There is a risk of collapse of one or more blocks in some schools which are at or approaching the end of their designed life-expectancy and structural integrity is impaired. The risk predominantly exists in those buildings built in the years 1945 to 1970 which used 'system build' light frame techniques." Concerningly the level of risk has increased, as the report states "The likelihood of the school buildings safety risk increased in October 2021 due to the increased numbers of serious structural issues identified. The impact and likelihood are unlikely to reduce in 2022, as there was no agreement to increase condition funding or the scale of the rebuilding programme at SR21."
13. There are three key elements that ASCL members would like to see with regard to buildings and safety. Firstly, equality and equity of provision wherever schools and colleges are located in the UK and whatever the context of their site(s). Secondly, sufficient funding to implement appropriate safety measures to keep, pupils, staff and resources safe. Thirdly, clear guidance on the requirements on school and college leaders.
14. One of our members' key concerns is the presence of asbestos in many older school buildings. The government's solution to this problem has been to provide guidance on how to safely manage the presence of these materials. Worryingly an estimated 80 per cent of schools in the UK contain asbestos, and much of this asbestos has been in situ since the 1940s-70s. All of the asbestos in schools is old, and much of it is in a deteriorating condition, and the current asbestos regulations are not designed to measure the risk from asbestos. Since 1980, according to the HSE Occupational

Mesothelioma Statistics, more than 400 school teaching professionals have died of mesothelioma in Britain, with around 300 having died since 2001. Between 2003 and 2020, the mortality statistics also show that ten school secretaries, thirteen nursery nurses, 39 teaching assistants and 35 school midday assistants died of mesothelioma. School caretakers, cleaners, science and technology technicians and cooks have also died from mesothelioma, but as their deaths are not recorded under school occupations it is not possible to ascertain how many. It is likely that the occupational death statistics significantly underestimate the number of school staff that die of mesothelioma, because they do not include the deaths of anyone over the age of 74 and they do not include former school teachers whose last occupation was not teaching. Mesothelioma has a long latency period, and as such, many who die of mesothelioma are 75 or over. Therefore, the actual number dying of mesothelioma could be much higher.

C. Answers to specific questions

Question 1: How well do schools and responsible bodies (mainly academy trusts and local authorities) understand the condition of their school buildings and the work that is required to maintain and repair them?

15. It is not possible to quantify how well schools and responsible bodies understand the condition of school buildings and what is required to maintain them. However, we can be confident that it will vary greatly across the sector. Factors will include access to technical expertise, knowledge and experience of employed estates staff, regularity of training, and quality and understanding of inspection reports. This is not an exhaustive list but gives an indication of the complexity. We must also recognise that there will be those who understand fully what is required but have insufficient funds to rectify issues.
16. There are a number of compliance and inspection activities by regulators, including those undertaken by the Health & Safety Executive (HSE) and Education and Skills Funding Agency, that will provide some evidence.
17. There is evidence from the inspection activities carried out by the HSE as the UK government agency responsible for encouragement, regulation and enforcement of workplace health, safety and welfare, including planned single-issue inspection programmes and visits initiated from reportable incidents or complaints. Recent planned single-issue inspection programmes include Covid-19 and management of asbestos in schools.
18. The HSE's Covid-19 spot checks and inspections of 5,500 schools in England resulted in minimal enforcement action – just two improvement notices.
19. The current HSE management of asbestos inspection programme in schools (2022-23), has highlighted the difficulty that some responsible bodies have with dealing with asbestos present in the school estate. Recent HSE notices evidence the issues:
 - Notice number 313002874, issued on 29 November 2022, stated “There is no written plan, referred to as an asbestos management plan which sets out the measures for actively managing the risks from ACMs.”
 - Notice number 313058552, issued 15 November 2022, stated “1 x PN served you have failed to reduce the exposure of asbestos dust as reasonably practicable around the free standing pillar that is not effectively encapsulated.”
20. Most concerningly, a recent HSE prosecution case highlighted the tragic consequences of not acting on recommendations from inspection reports. The case was the prosecution of a council following the death of a young girl hit by a falling tree in her school

playground. An investigation by the HSE found the tree had decayed and was in poor condition. The council had failed to identify the extent of the decay or to manage the risk posed by the tree.

21. The Department for Education's May 2021 Condition of School Buildings Survey states that primary schools represent more 75% of schools, and secondaries 15% . However, secondaries have the most internal space (nearly 4,000,000m² more available space in teaching blocks than primary schools). Unsurprisingly, secondary schools have the highest condition need per school, followed by post-16 establishments and all-through schools. These are the largest school types in the estate, so they are likely to have the highest need per school. Average condition need per m² is the truest measure we have for the condition of different types of schools. Pupil referral units have the highest condition need, with £170/m² of need, compared to the 'best' condition type of school which is all-through schools with £101/m² of need. Primary schools are, on average, in a worse condition than secondary schools when comparing on entire school level, with £157/m² of need compared to £139/m². When comparing individual blocks, primary schools and secondary schools have similar distributions of need. The Department for Education's May 2021 Condition of School Buildings Survey states that schools in the West Midlands have the highest average condition need per school and second highest condition need per m². Others have similar need. The region with lowest condition need per m² are London and the South West.

Question 2: What impact does the condition of school buildings have on educational provision?

22. ASCL believes that consideration should be given to what measurements are included in the analysis of impact. There are clearly detrimental impacts when parts of the school estate are not suitable or safe learning environments. ASCL would encourage the government to consider impact on individual or groups of learners in the broadest sense, for example, looking beyond learning, to include factors such as, safety, physical health, mental health and access to opportunities.
23. [The Impact of Schools Buildings on Student Health and Performance: A Call for Research Report \(2012\)](#) provides information on available evidence and the further research required. The reports states there is strong evidence to support the concept that school buildings impact student health and their ability to learn. Specific examples include the impact of minimising background noise and allowing voices to be heard clearly, deprivation of natural light disrupting children's melatonin cycles and impacting alertness, improved comfort when there is regulation of thermal controls, minimum ventilation standards improving test performance, and prevalence of Sick Building Syndrome. The report gives the following examples of where further research is required:
- When prioritization is necessary, which building projects can be expected to have larger impacts on facility quality and student health?
 - What are the impacts of high-performance school buildings, above and beyond an adequate (and potentially new) school building?
 - How do high-performance design features interact with each other? Relationships such as those between daylighting and acoustical design are understood less in terms of how they interact than in isolation.
24. The Education Endowment Foundation [teaching and learning toolkit](#), which analyses international evidence on teaching 5-16 year olds, states that the built environment has "very low or no impact for low cost", but is clear that this assessment is "based on very limited evidence". The toolkit says the following on this issue: "The built environment is

the school building and the physical conditions of the school. Related interventions include moving to a new school building and improving the design, air quality, noise, light, or temperature of an existing building or classroom. Overall, changes to the built environment of schools are unlikely to have a direct effect on learning except at the extremes: impact is minimal once an adequate building standard has been achieved.”

25. However, it is clear that more research is needed into this question. It is also clear that many school and college buildings are *not* currently of an adequate building standard. ASCL would therefore recommend that the Department for Education undertakes a thorough review of available research, and considers commissioning further research if necessary.
26. The DfE committed to providing £25million for portable CO2 monitors to state-funded schools. It seems highly likely that the monitors will have identified that some school and college learning spaces, blocks or buildings are unsuitable for occupation of standard class sizes. It appears that information relating to air quality was not collected in the condition surveys. Other jurisdictions are going further. The Isle of Man, for example, is reportedly providing devices that will not only monitor CO2, but also heat, humidity and light. In light of this new challenge, and the inherent high risk to health and wellbeing of pupils and staff, additional capital funding should be allocated by the government to address remedial works. The government must also recognise that fitting systems may mean increased utility and inspection costs, for which additional revenue funding will need to be provided.

Question 3: Are DfE’s arrangements for schools and responsible bodies who want to apply for capital funding clear and easy to understand?

27. ASCL believes that there should be greater equity of access to condition funding to help improve school and college estates.
28. The CIF bidding process is not transparent and is not easily accessed or successful without the engagement of costly experts to write the application submission. Successful applications should be linked more effectively with a robust condition data collection process which delivers funding in a way that enables school and college leaders to plan capital works more strategically over time. This requires greater alignment between access to CIF and access to school condition allowance (SCA).
29. The 2017 National Audit Office report Capital Funding for Schools (based on data from 2012- 2014) stated that deterioration of the school estate is a significant risk to long-term value for money. This report estimated that it would cost £6.7 billion to return all school buildings to satisfactory or better conditions, with a further £7.1 billion needed to bring parts of school buildings from satisfactory to good condition. At the time of the report, Sir Amyas Morse, head of the National Audit Office, advised that the Department for Education “must make best use of the capital funding it has available – by continuing to increase the use of data to inform its funding decisions and by creating places where it can demonstrate that they will have the greatest impact”.
30. The Department for Education’s May 2021 Condition of School Buildings Survey found that it would cost £11.4 billion to repair or replace all defective elements in the school estate. The highest need area is electrics (needing £2.5 billion), followed by items such as boilers and pipework, and then external walls, windows, doors, and roofs (needing £1.5 billion). It is completely unacceptable that children, young people and staff are working in learning environments that are not of a satisfactory condition. This means that many children and staff are learning and working in buildings which are not a conducive

environment for education, and that schools face considerable ongoing costs for routine maintenance.

31. These two reports suggest a growth in need in the school estate over the period of the two data collection programmes.
32. Part of the issue that schools have with meeting the net zero carbon targets is the availability of dedicated revenue and capital funding to make the necessary changes and retro-fits to the school estate. The government's answer has been to provide funding from the Department for Business, Energy & Industrial Strategy (BEIS) via the Public Sector Decarbonisation Scheme. However, schools are bidding alongside much larger public sector bodies, which have access to much greater resources and technical expertise, such as bid writers. Where schools have been successful, this has had a significant impact. Some specific examples include:
 - **Comberton Village College** – ground source heat system, cost £3million, with funding of £1.9million from Government Public Sector Decarbonisation Scheme (Phase 2). The balance of capital investment came from Cambridgeshire County Council. The trust and the council entered into a Managed Services Agreement (a form of operating lease) on the balance of plant not covered by the grant funding, to replace the college's oil-fired boilers with ground source heat pumps. The project aimed to reduce the carbon emissions from heat by 66% (233 tonnes) in the first year and is expected to deliver a £40,000 per annum saving.
 - **Windsor Academy Trust** – awarded £2.4m to invest in seven schools across the West Midlands. Awarded a total of £2,470,601 in government funding under Phase 1 and 2 of the grant schemes. The updates include an air source heat pump fitted at one school, solar panels fitted at four schools, LED lighting fitted at five schools, heating controls fitted at six schools, double glazing fitted at four schools, and metering works implemented at nine schools. Annual estimated savings are £209,900.
 - **London Borough of Hounslow** – decarbonisation measures across 33 primary schools. Awarded £7,647,689 from Public Sector Decarbonisation Scheme (PSDS). Schools accounted for 70% of Hounslow's carbon emissions. The focus was on heat decarbonisation across all 33 schools, electrical infrastructure upgrades, air source heat pumps, piping insulation, solar panels across 27 schools, LED lighting across eleven schools. Annual estimated savings are £250,000.

Question 4: What influences schools and responsible bodies to use revenue funding for capital projects, and how have these factors changed over time?

33. Circa 60% of the school estate was built pre-1976. Many schools will have had multiple small and large retrofits and will not have been built to modern building standards and guidelines. There will be variation in lighting systems, window types and ventilation systems.
34. There are three key elements that ASCL members would like to see regarding buildings and safety. Firstly, equality and equity of provision wherever schools and colleges are located in the UK and whatever the context of their site(s). Secondly, sufficient funding to implement appropriate safety measures to keep, pupils, staff, and resources safe. Thirdly, clear guidance on the requirements on school and college leaders.
35. One of our members' key concerns is the presence of asbestos in many older school buildings. The government's solution to this problem has been to provide guidance on how to safely manage the presence of these materials. However, ASCL members do not

think this is good enough. It is our view that the government should remove this risk entirely through the phased removal of asbestos from all school and college buildings.

36. In 2017, the Public Accounts Committee [report](#) into capital funding in schools criticised the Department for its lack of knowledge about the school estate and the impact this was having on decision making. Specifically recommending that it “needs to understand the prevalence, condition and management of asbestos, and know more about the general suitability and safety of school buildings.”
37. A school [had to be closed in April 2018](#) because asbestos had been disturbed, potentially putting students and staff at risk. Damaged asbestos was discovered in multiple locations in the school, which was apparently caused by drilling work the year before. The contractors used the asbestos survey they were given but not all asbestos had been recorded on it.
38. The Joint Union Asbestos Committee (JUAC) Report 2021 (page 21) outlined the widespread failure of 60 CLASP (Consortium of Local Authorities Special Programme) schools known to have substantial asbestos. 38 of the 60 schools had failed to provide evidence that they had sealed gaps in columns and replaced missing or damaged ceiling tiles. Occupants are likely to have a medium to high risk of developing mesothelioma in future.
39. Consideration should be given to whether sites identified for new or re-built schools and colleges remain fit for purpose, including monitoring of air quality and environmental impact studies. It is unacceptable that new schools have recently been built in areas of very poor air quality, with high levels of pollution, and are not able to have opening windows as a result. With natural air ventilation cited as key recommendation of good practice in ventilation by the Department for Education and the Health and Safety Executive (HSE), it would seem sensible to locate education provision in areas with good air quality and to provide supporting infrastructure, such as transport links, which would also support energy efficiency and minimise the environmental impact.
40. Any new or revised policy requirements which will incur material capital expenditure must be fully funded and not come from existing school budgets.

Question 5: What are the main challenges for schools and responsible bodies in spending capital funding efficiently and effectively?

41. The most significant challenge for schools is that the quantum of funding does not meet the need, and often responsible bodies have to scale projects to meet the budget available. It can also be challenging to obtain the requisite number of quotes and fix prices in line with meeting procurement process and approval requirements. With rising inflation impacting materials and workforce costs, quotations can soon become out of date.
42. The timeline from application to announcement of successful projects can be problematic and could be improved. Shortening the timeline to ensure that works can be scheduled to fit the regular closure periods within the academic year would be advantageous. The current timing of the announcement of successful applications has slipped to late spring / summer.
43. ASCL believes that the funding available through devolved formula capital allocations is insufficient to meet the intended function, and that the current distribution methodology does not accurately reflect condition. The lack of coherence between different strands of

schools' capital also represents a barrier to keeping some schools in a condition deemed fit for purpose. For example, the DFC allocation may be significantly below the minimum threshold for applying for condition improvement funding (CIF).

44. According to the government's [own figures](#), capital spending in financial year 2021/22 was at its lowest since 2009/10. Just £4.9bn was spent on schools, early years provision and further education establishments. Between 2009/20 and 2021/22 capital spending declined by 50% in real terms.
45. Perpetual under investment in the education estate has led to deteriorating school buildings, with many containing materials that we never designed to still be in use. This includes reinforced autoclaved aerated concrete (RAAC), a material with low compressive strength compared to traditional concrete, and therefore unsuitable for some types of construction, particularly with its susceptibility to water damage.
46. It is completely unacceptable that children, young people, and staff are working in learning environments that are not of a satisfactory condition, and not a conducive environment for education. Schools and colleges face considerable ongoing costs for routine maintenance, before even being able to think about sustainable long-term improvements.

Question 6: How much of a factor are issues of environmental sustainability (e.g. energy efficiency, heating and cooling or resilience to extreme weather) in schools' or responsible bodies' decisions to either upgrade or replace school buildings?

47. Environmental sustainability, energy and water efficiency, and managing extreme weather conditions is of high importance to ASCL members. They are leading on being part of the solution to tackle climate change, through upgrading existing parts of their estate where they can and teaching children and young people about these important topics. In our answer to question 3 we provided detailed examples of projects that are environmentally sustainable and energy efficient, made possible by successful funding bids.
48. One of ASCL members' key concerns is that specialist and technical expertise comes at a cost. Leaders are keen to be supported with procurement guidance and information on 'trusted' suppliers who understand the education context and the complexities of various building, site and infrastructure designs.
49. Special schools and alternative provision settings would like to see the development of support, advice, and guidance specific to their context, which would help them to address issues of particular relevance to them. This includes specialist buildings, equipment, and products and services such as sensory rooms, hydro pools, transport and adaptive technology.

Question 7: What are your views (if any) on DfE's sustainability and climate change strategy?

50. There is welcome progress on which to build, including the net zero carbon commitment, the establishment of a dedicated DfE sustainability unit, and a strategy for education. However, the government must provide adequate funding to address the climate emergency. There must be a coherent and well-planned response across all parts of national and local government to make immediate and sustained change.

51. It is unclear yet to what extent this activity will lead to sustained and impactful change. The strategy itself is welcome but includes little detail or specific research based targets. The 'big ticket' items in the strategy – the climate leaders award and national education nature park – are admirable and educationally interesting but are unlikely to shift behavioural change and structural issues at the required pace. Perhaps too much emphasis is being placed on longer-term future resilience as opposed to preventative action.
52. Overall, ASCL members are very supportive of the strategy. Many have already embedded climate change, sustainability, and related topics into their curriculum, and have taught these issues for some time. Many members of staff, and particularly children and young people, are engaging in activities and award programmes which support sustainability and climate change, such as eco councils, donation points, energy management, water efficiency, recycling schemes, swap shops and community gardens/projects. Many schools and colleges also embed diverse experiences into their curriculum, such as trips and visits, to ensure children and young people, particularly those from disadvantaged backgrounds, experience local, regional, and national biodiversity.
53. ASCL welcomes the inclusion of all parts of the education system in the strategy, from private nurseries to further and higher education institutions. Our members in all sectors, and in both state and independent schools, see significant potential for co-operation and partnership within and across sectors, and plan to take this forward when we have more detail of the proposals.
54. We would encourage the government to consider not only national perspectives and learning on climate change and sustainability, but also to include and learn from international experts, practice, and projects already in train.
55. The Climate Action Plan requirements are vague but appear to be a key part of the strategy, as we assume they will include a broad range of factors such as energy consumption, water efficiency and thermal efficiency. We have several questions we would ask the DfE on this part of the strategy:
- Does the DfE see the Climate Action Plan as being the next step on from the existing Streamlined Energy & Carbon Reporting (SECR), under which some academies are required to report?
 - Will it be a legal requirement to have a Climate Action Plan in the future?
 - How will they be monitored? Will they be for internal use within education settings, or another reporting requirement to central government?
 - Will the DfE or an approved partner provide a template and guidance which considers the diverse nature of the school estate?
 - How much of the plans could be pre-populated or automated?
56. ASCL suggests that DfE undertakes a workload impact assessment on the strategy proposals before deciding to implement additional requirements, particularly where these could be linked to a statutory requirement or an accountability measure. We would be very happy to be part of further conversations on this, particularly as there appears to be limited representation from schools and colleges in the DfE data working group.

Question 8: Does DfE provide good support and guidance to schools and responsible bodies with regard to:

- **encouraging effective estates management;**

- **submitting accurate data on their buildings;**
- **sources of funding available to make improvements to school buildings;**
- **and**
- **investing in capital projects that are efficient and environmentally sustainable in the long term?**

57. The DfE and other parts of government already hold significant amounts of data collected from education settings and other sources, such as the Condition Data Collection (CDC), Streamlined Energy & Carbon Reporting (SECR) and Land and Buildings Collection Tool (LBCT). Before the DfE introduces new targets and measures, it needs to understand what information schools and colleges have and whether it is possible to collect comparable data. The DfE also needs to appreciate that the existing level of knowledge and expertise in individual schools will vary. ASCL would encourage the government to undertake a root and branch audit of the existing data it collects and holds, before requesting additional information and potentially creating unnecessary workload.

58. The government's Risk Protection Arrangement (RPA) is marketed as an alternative to commercial insurance for academy and Local Authority schools. It is therefore in the government's own interest to improve the resilience and the risk profile of the UK education systems estate, fabric, and infrastructure.

D. Conclusion

59. In short, we believe that the government needs to develop a more strategic and sustainable approach to maintaining the school and college estate and provide a less disparate approach to capital funding.

60. I hope that this response is of value to your consultation. ASCL is willing to be further consulted and to assist in any way that it can.

Hayley Dunn
Business Leadership Specialist
Association of School and College Leaders
6 February 2023