

A spotlight on

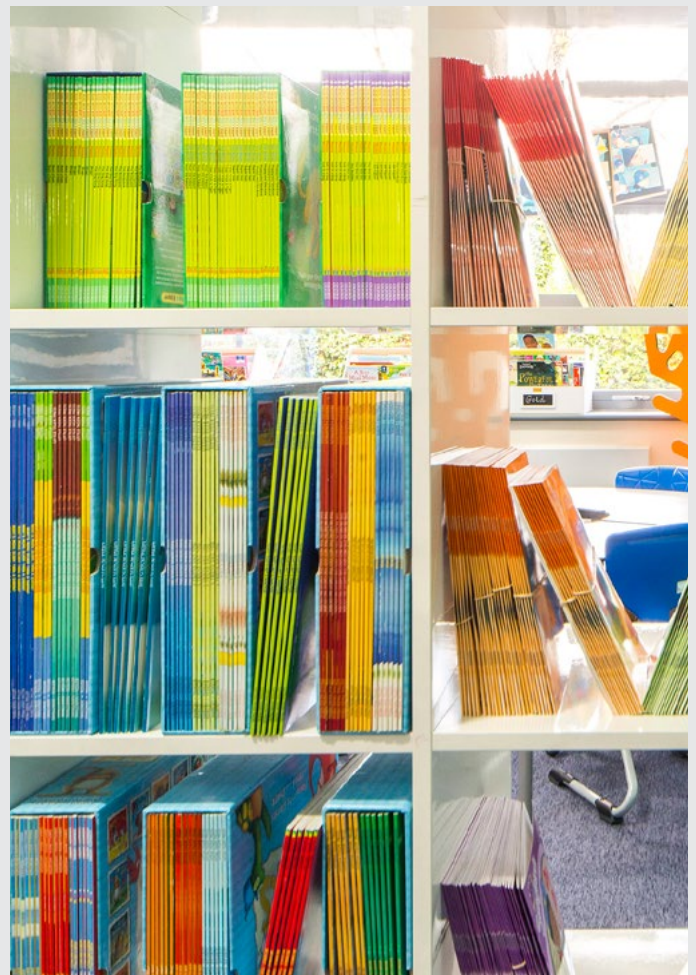
Wellbeing in schools

Why is it important, what does it look like and how can it be achieved?

The idea of 'wellbeing' has become increasingly prevalent as a measure of physical and mental health, happiness and comfort, along with a growing understanding that these factors affect how we do things. Aside from research which links wellbeing to increased productivity and attainment, the subject has, of course, been brought into sharper focus due to the impact of COVID-19 on our personal and working lives. The pandemic has led many of us to reevaluate our priorities and has demonstrated how important our physical environment is to our health and wellbeing.

Whilst a strict definition is still evolving, the concept of wellbeing acknowledges its positive benefits in almost every facet of our lives, both social and economic, and a direct relationship is now accepted between health and wellbeing and an individual's ability to maximise their potential.

Although the concept is most developed in the business world, links between wellbeing and attainment or productivity are just as relevant to the world of education. Increased attention in modern office design, driven not just by altruistic employers but also in recognition of tangible economic benefit, has developed standards that can equally be applied to schools.



Why is wellbeing important in schools?

Good health and wellbeing is an established United Nations (UN) Sustainable Development Goal, and a number of studies now support the link between 'design for wellbeing' and academic achievement. A 2014 Public Health England briefing document 'The link between pupil health and wellbeing and attainment' summarised the key evidence as follows:

1. Pupils with better health and wellbeing are likely to achieve better academically.
2. Effective social and emotional competencies are associated with greater health and wellbeing, and better achievement.
3. The culture, ethos and environment of a school influences the health and wellbeing of pupils and their readiness to learn.
4. A positive association exists between academic attainment and physical activity levels of pupils.

An environment designed to support wellbeing can, therefore, help in promoting greater personal resilience, independence and creativity. Implementation can also go hand-in-hand with wider sustainability targets — an increasing concern for schools as for society in general.

Benefits are not only restricted to pupils. A positive, healthy working environment can deliver tangible benefits for staff, aiding job-satisfaction, and motivation. Well-designed, appropriate facilities such as staff work areas and social spaces help to reduce stress and facilitate teachers in supporting their pupils. Such benefits and facilities can also be important in aiding recruitment and retention.



What does wellbeing look like in a school?

If the design of our internal and external environments affects health and wellbeing, what does good 'wellbeing design' look like and how can it help to deliver a 'healthy building'? In other words, what design elements do we need to consider and how do they contribute to an overall environment that is conducive to wellness? These can be broken down, broadly, into the following areas:



Physical activity: It's been well established that regular physical activity positively affects brain development and correlates with higher attainment. But it's not just formal facilities for sports and external play that are important, as access to the outside at break times and even moving between lessons need to be considered as part of this.



Sound: Reducing noise pollution, enhanced acoustic separation and effective reverberation control can increase speech intelligibility. These factors make it easier for pupils to hear and understand what's being said, and also reduces vocal strain for teachers.



Biophilic design: The theory that a connection to nature improves our lives has been scientifically proven to reduce blood pressure and improve attention and focus. Providing views of green spaces has also been shown to be effective in addressing the incidence of depression.



Thermal performance: Improving insulation, avoiding temperature extremes and maintaining a controllable, even temperature can improve physical comfort. This helps both teachers and pupils to focus.



Lighting: Good daylighting and artificial lighting that responds to circadian rhythms — that moderates the quantity and quality of artificial light to mimic daylight — can help to maintain alertness during the day and aid relaxation towards the evening.



Water: Maintaining hydration aids health and wellbeing and can be encouraged by providing local access to potable water, both indoors and outside. This can be helped by a sufficient, even distribution of water fountains.



Air Quality: Recent research indicates that reduced levels of CO₂, Volatile Organic Compounds (VOCs) and pollution have significant positive impacts on the cognitive function of a building's occupants. Good ventilation and careful selection of materials and finishes can therefore have a significant positive impact.

What can we do to improve wellbeing and what does it cost?

It is likely that many of the principles of wellbeing are already considered in existing schools, such as access to space for outdoor activity, well planned areas to promote learning, and good consideration of lighting.

When briefing and designing new buildings, wellbeing principles can be considered and accommodated from the outset by reviewing orientation, layout, services strategy, materiality, etc. Even in existing buildings however, there are many opportunities to improve upon the current situation, from light touch changes to more significant refurbishment works.

Some examples include:

- Managerial/operational changes:** promoting healthy eating, exercise and good mental health.
Limited cost: signage, staff training, etc.
- Increased or replacement artificial lighting with lighting control to improve quantity and quality of output.**
Indicative cost: £125/m² - £150/m²*
- Improved acoustics:** Reduction in internally generated noise (such as plant), enhanced (acoustics): acoustic separation and improved reverberation time in teaching spaces.
Indicative costs:
 Class A suspended ceiling with visible grid and demountable tiles: £60 - £75/m²*
 Plant room acoustic wall lining panels: £75 – 100 / m²*
 Suspended acoustic ceiling panel;
 circle 800mm diameter: £280 - £300 / Nr*
 Suspended acoustic ceiling panel;
 rectangle 2400 x 1200mm: £450 - £480 / Nr*
- Improved thermal comfort:** Insulation can be retrofitted, and windows upgraded. Solar shading can also be added to reduce overheating.
Indicative costs:
 Insulation, plasterboard lining and decoration: circa £65/m²*
 Window replacement: double glazed - £650 - £750/m²
 Window replacement: triple glazed - £850 - £1,000/m²
 Solar shading: £150 – £250/m²

- Drinking water:** Increased provision and distribution of drinking water stations.

Indicative cost: Water fountain £750 - £1,500/Nr*

- Air quality:** Humidity controls, CO2 monitors linked to opening windows and the reduction or elimination of polluting materials and finishes such as VOCs.

Indicative costs:

Installation of BMS system: £40 - £60/m²

Low VOC carpet tile floor finish: £35 - £50/m²*

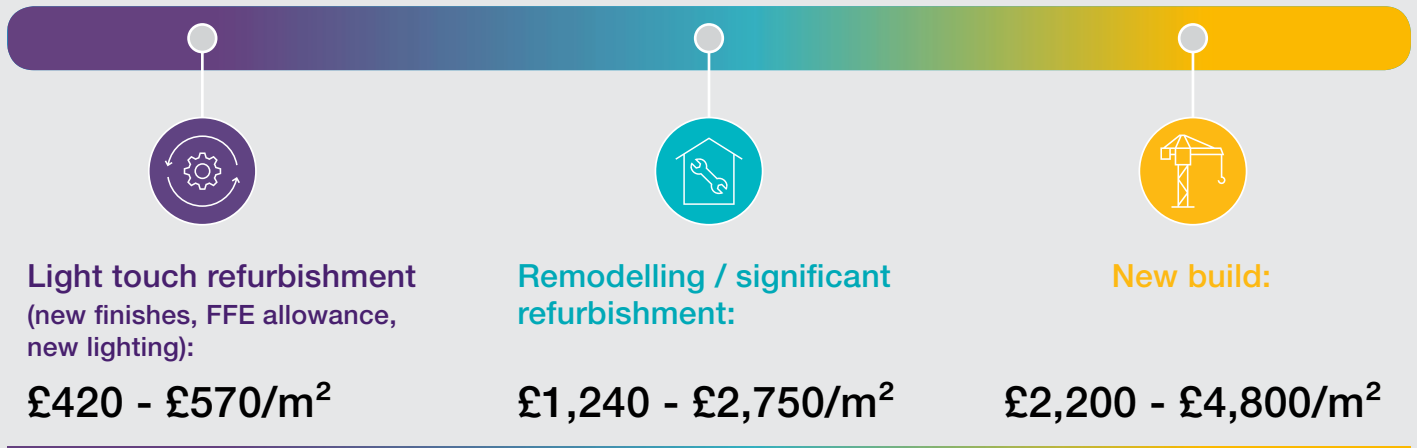
Low VOC vinyl floor finish: £60 - £80/m²*

Low VOC paint finish: £12.50 - £15/m²*

- Variety of spaces:** Increased variety of spaces to provide experiential interest and enjoyment.
 Costs are dependent on types of spaces created – e.g. sensory gardens, breakout spaces etc.
- Stimulating interior design:** Careful consideration of light, colour, texture and materials.
 Costs are dependent on how achieved, e.g. redecoration, fittings, furnishings and equipment, etc.
- Physical and visual connections:** Improved physical and visual connections to the natural world, both within and outside the building.
 Costs are dependent on how achieved, e.g. plants, placement of rooms/desks, etc. to increase visual connection, addition of glazing in façade, etc.

**Costs are dependent upon specification and the indicative costs above include for subcontractor costs assuming piecemeal works, managed by the school.*

Where several interventions are to be undertaken at the same time, it is likely that the works will require a main contractor to manage the works. The cost ranges below give indicative costs for the different levels of work; however, costs will be dependent on the project specifics.



	Light refurbishment - new finishes generally, FFE allowance, new lighting		Remodelling / significant refurbishment - new partitions, new finishes, FFE allowance, new MEP services to cater for new layouts		Remodelling / significant refurbishment - as previous plus fabric enhancements		New build	
	Low £/m ²	High £/m ²	Low £/m ²	High £/m ²	Low £/m ²	High £/m ²	Low £/m ²	High £/m ²
Works Cost Estimate (Building Cost)	420	570	1,240	1,570	2,000	2,750	2,200	4,800
Professional Fees and Surveys (18%)	76	103	223	283	360	495	396	864
Other Development Costs	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
Design Development (10%) and Construction (5%) Risk Allowances	74	101	219	278	354	487	389	850
Inflation	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
VAT (20%) Professional advice should be obtained	114	155	336	426	543	746	597	1,303
Total Development Cost (Rounded)	680	930	2,020	2,560	3,260	4,480	3,580	7,820

Factors affecting cost:

- Building/area type (e.g. hall, sports pavilion)
- Condition of existing building/services
- Abnormals (e.g. planning requirements)
- Size of project (economies of scale)
- Working conditions (e.g. considerations for working in term time, etc.)
- Consideration of life cycle costs (e.g. some interventions may reduce energy use and therefore operation costs)

Summary

There are opportunities to maximise the benefits of wellbeing for staff and pupils throughout the lifecycle of an asset. With a new-build, early consideration of requirements means that the design can be optimised for wellbeing, e.g. orientation, services strategy, layout, materiality, etc. Wellbeing elements may be required for other reasons, e.g. to meet energy targets or for planning.

Wellbeing can be as simple as management changes or a light refurbishment to incorporate key elements. Interventions can also be made to improve an existing building for wellbeing; some principles may reduce maintenance or operation, e.g. energy efficient lighting/thermal insulation. The opportunity can be taken to improve wellbeing as part of maintenance cycle renewal.

Wellbeing should not be seen as an expensive extra, and there are great opportunities to maximise pupil achievement and to help teachers thrive if the principles are implemented into new buildings or as part of maintenance strategies.

Talk to an expert



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