



Manifesto for Learning Environments

A CALL TO ACTION



THIS CALL TO ACTION COMES FROM COLLABORATION BETWEEN THE BRITISH COUNCIL FOR SCHOOL ENVIRONMENTS (BCSE) AND THE BRITISH EDUCATIONAL SUPPLIERS ASSOCIATION (BESA)

British Council for School Environments

The British Council for School Environments (BCSE) is a membership organisation made up of more than 100 schools, local authorities, construction companies, architects and others involved in, and concerned about, designing excellent learning environments. It is a forum for the exchange of best practice, research, dialogue and advocacy, helping organisations from across the sectors to understand each other's needs.

The BCSE exists to research, communicate and develop best practice in all aspects of school design and construction. Our mission is to stimulate continuous improvement in the commissioning, design, construction and use of school facilities and promote the link between excellence in teaching and learning and the learning environment.

British Educational Suppliers Association

BESA (British Educational Suppliers Association) is the trade association for the British educational supplies industry. Its 300 members include manufacturers and distributors of equipment, materials, books, consumables, furniture, technology, ICT hardware and digital-content related services to the education market.

BESA acts as a conduit between educational suppliers and purchasers, and the supplies industry and policy makers. Its mission is to:

- Influence national education policy on issues pertinent to education funding and educational resources
- Develop national support services for practising teachers
- Liaise between education and industry to improve available resources for the sector and to create guidance for their effective deployment
- Inform and improve the business of its members.

INTRODUCTION

The United Kingdom is in the midst of the largest investment in school buildings for generations. This key moment in education is a unique opportunity to design, deliver and equip buildings that are capable of supporting education reform, a new vision for education, children's services and our communities.

The potential rewards of this opportunity are huge: genuine transformation of education for our children, our society, our economy and our future.

We call on key education stakeholders to work individually and collectively to look at the process, detail and practice of creating and equipping attractive and effective learning environments which support teaching and learning, raise pupil aspiration and encourage community. It is our collective responsibility to analyse each step in the process to identify and challenge the barriers to transformational change. This opportunity must not be lost.

This document aims to act as a catalyst to encourage education leaders and practitioners, as well as those who will deliver, build, manage and equip school buildings, to discuss the issues and find solutions to the opportunities and challenges presented by the government's investment to transform education.



A CALL TO ACTION

Working with their members, BCSE and BESA have identified core principles which taken together support the creation of truly effective environments for learning.

If we do not spend time to consider these core principles, there is a real danger that the benefits of this massive investment will be wasted. We will be left with school buildings which are not fit for purpose and may be obsolete even before they are occupied.

For each of the core principles we will lay out the rationale and suggested strategies for change.

The core principles which underpin any effective learning environment are:

- Design for teaching and learning
- Participation and expertise
- Sustainability
- Procurement
- Design quality
- Small school culture
- Tested innovation

There are many organisations currently developing these principles. The appendix to this paper contains a review of some of the recommendations that have been made in key publications over the past few years by experts, from academia and industry. The list is not exhaustive, but highlights the fact that much work has already been done.

This 'call to action' is intended to be a living document that can be developed and informed as our thinking changes. We call on all practitioners to join us in a set of core principles which will ensure that our school environments are truly fit for teaching and learning.



DESIGN FOR TEACHING AND LEARNING

Many of our school buildings today are obsolete as environments for effective teaching and learning.

84% of our British schools currently in use were built before 1976¹. At present British schools are largely representative of our past, not our future. To put this into context, the Apple II which is widely regarded as the first home computer, was launched in 1977. Most of our schools were built before this. Consider the importance of ICT today in our working and learning lives. Life has changed and so has teaching and learning.

If we are to maximise the current investment in school buildings, we must put teaching and learning requirements at the heart of the design brief. As the needs of learners change, school design and the resources in schools, must respond. As teaching and learning changes, it dictates new spatial requirements which place an emphasis on flexibility, external spaces and technology - a diversity of spaces, a diversity of resources and equipment, for a diversity of learning.

Drivers for change include an increased focus on personalised learning; the tailoring of education to individual need, interest and aptitude to ensure that every pupil achieves and reaches the highest standards possible and that they are equipped for future life, notwithstanding their background or circumstances. This may result in a new definition of a 'school', with KS4 pupils, for example, accessing their 'home school', (a base situated within a wider learning landscape, across which they access learning in a variety of other locations).

Every Child Matters² and Sure Start³ necessitate a new 'joined up' approach to the well-being and education of young people and children with the inclusion of services such as health, social services and police to be located on or near school sites. The extended schools agenda creates the need for schools which are at the centre of communities and provide facilities for life-long learning, community entertainment and development. Co-locating or integrating Council services gives schools the opportunity to be community hubs, increasing social and economic capacity in local neighbourhoods.

The development of ICT as a teaching and learning tool is having a direct impact on the environment of a school. Increasingly, young people are having access to media-rich learning resources and the means to learn anytime, anywhere, through a range of devices from PCs to digital TV and games consoles. The development of online communities enabling communication with a wide range of experts can help facilitate their learning. This, along with the development of the other policies mentioned above will have a direct impact on the way schools are designed and equipped. There will be a greater need for spaces which facilitate learning through ICT and enable young people to learn about issues around citizenship in a less formal environment. For example, there will need to be much more emphasis placed on the provision of 'social spaces' within schools - areas with resources where young people can follow independent study and can learn in a safe environment the importance of social interaction.



STRATEGIES FOR CHANGE

- **Ensure that teaching and learning lies at the heart of any design brief.**
- **Support school leaders to enable them to consider teaching and learning issues when working on the design process and the equipping of any school - especially taking into account the impact of multi-use buildings and the need to cater for a variety of audiences.**
- **Develop a more 'joined up' approach to designing school buildings which takes into account changes in education as well as the latest in policy and pedagogical thinking.**
- **Develop thinking around the value of less formal learning spaces such as 'social spaces' as important for learning.**
- **Ensure that there is early consideration across the local authority area about how the school buildings and the resources in them will be developed within the wider context of the provision of local public services, e.g health, sports and libraries and long-term plans for regeneration.**
- **Consider that increased community involvement will require an understanding of the need for diverse and specialised resources and equipment.**

PARTICIPATION AND EXPERTISE

Those who use a learning environment are the real experts and involving them in the design and equipping of a school building will ensure the creation of an effective school.

Involving users, including pupils, staff and members of the community is essential in order to achieve value-for-money, effective school environments and efficient procurement processes.

Encouraging the inclusion of users' ideas, comments, needs and desires into the design brief can engender a sense of ownership. This can have long-term effects in the way a school environment is used. If users fully understand what an environment can do, there will be more incentive to ensure that the school does what it should. The National Audit Office report on Academies⁴ found that the time and effort spent working with users on achieving their goals was crucial to the design of many of the Academy buildings.

Users can be involved in all aspects of the decision-making process, from site selection and building design to fixtures, fittings and furniture, including room layout, access requirements and educational equipment on the way.

There are wide-ranging, tangible benefits to be gained by involving people in shaping their local surroundings:

Better decisions and outcomes

All the people who use the school (or have an interest in it) will be the best source of knowledge and wisdom about how the current school's systems and design function and what works well or how it could be improved. If this knowledge is gathered and used, better decisions will be made as to how the school might be improved.

Positive thinking

If staff and pupils understand what options are realistically available, they are more likely to take the project seriously and think positively about it. Creating a design together means that everyone has an interest in making it work once implemented and in the future. The resulting consensus can make the process of implementation and construction more effective.

Fit for purpose

User involvement strategies aim to produce environments in which teachers want to teach and which allow them to meet the demands of a curriculum. They will want to choose the resources which they know will be best for their children and their own individual circumstances.

Thinking space/inspiration

The participatory process creates an opportunity for all to think about the future direction of a school and how this might be translated into a design not just for a building, but for a 'learning environment', which supports this. It also provides an opportunity for mulling over ideas that can be revisited at a later stage of the process.

Improved relationships

Participation provides the perfect opportunity to forge links with the local community, businesses and local organisations. This is particularly useful for schools hoping to offer extended services. Working together on a design project can also help to improve relationships within the school, between teaching and non-teaching staff and pupils, or between different faculties.

Catalyst for change

Enabling discussion on the design and equipping of the school building can act as a catalyst for change to the management and pedagogy of the school.

Reduced maintenance costs

Participation encourages people to feel ownership over their own environment. This can lead to a reduction of vandalism and graffiti in schools. Where vandalism is reduced, there is a reduced maintenance cost, increasing a project's sustainability.

Value for money

Understanding a school's priorities better should result in a more effective use of the investment in its building.

STRATEGIES FOR CHANGE

- **Embed participatory design formally into design and procurement processes.**
- **Develop a 'framework of participation' which can ensure meaningful participation by all involved.**
- **Promote understanding of the importance of user involvement among those who deliver, build and equip schools.**
- **Employ an external facilitator over a long-term period, to lead the users through a visioning process, which starts from first principles. This role to include acting as 'a challenge', a mentor and an advocate.**

¹ DfES 2002

² www.everychildmatters.gov.uk

³ www.surestart.gov.uk

⁴ The Academies Programme, National Audit Office, February 2007.

SUSTAINABILITY

There needs to be a more consistent approach to ensure the development of schools which are sustainable in terms of the environment and the impact they have on the local community.

Sustainability means designing, constructing, operating and procuring schools in ways that minimise harm to the environment, and, where possible, improve the landscape in ways that encourage biodiversity. A sustainable school is also a school which supports the development of the local community, initiatives for regeneration and the 'whole child'.

Schools need to be at the forefront of sustainable development for many reasons:

- They are a major building sector, responsible for 14% of public sector emissions.
- They provide an opportunity to teach about sustainability, and generate interest in sustainability among communities.

In recent years there has been a significant drive towards creating sustainable schools but this needs to go further. The reduction of carbon emissions is not a statutory part of school design, which it should be, and current guidelines give too much room for interpretation. Sustainability requires diligence, it requires a change of culture, and it requires commitment from everybody: from children, parents and teachers through to the governing body and the local authority.

Sustainability, in terms of reducing carbon dioxide emissions, is not a given. It is often very fragile, and a lack of attention to good design and effective post-occupancy management can lead to dashed hopes. The educational supplies industry has been responding to the challenges set by this agenda - from compliance to the WEEE directive to working with architects and designers to ensure that design and functionality of equipment in a school setting reduces the effects of environmental damage.

It follows that for a school to be considered truly sustainable, its performance must be measured in practice. It cannot be assumed to be

environmentally friendly simply because certain techniques and technologies have been applied. Its performance needs to be reality-checked and benchmarked against best practice. Where aspects are found wanting, they must be put right quickly. To be fully sustainable, new learning environments and their equipment need to be agile enough to adapt easily to changes in pedagogy/use over the lifetime of the building.

BREEAM helps schools and local authorities to set environmental targets for new and refurbished school

buildings. It also serves as a useful tool for designers who want to demonstrate the environmental performance of their designs. However, it must be made clear that it is a measurement/benchmarking tool and there needs to be more support for teachers and designers in their initial thinking.

BREEAM should not be just a tick box exercise, but should be used to support the delivery of a realistic and sustainable schools' design and management strategy.



PROCUREMENT

Quite simply, the process of procuring school buildings and the equipment which will be used in them, should be as streamlined as much as possible to

achieve the best possible results - beautiful, sustainable schools which fully support teaching and learning, containing resources, chosen by those who need to use them.

BCSE and BESA welcome the government's intention to learn lessons from Wave 1-3 of the Building Schools for the Future (BSF) programme⁵ and hope that the experience that has been gained by them and our members will be used to build and equip better schools.

As it stands, the current procurement process can be an expensive exercise for bidding consortia and the costs involved can prohibit the participation of smaller teams. In addition, the current process wastes a considerable amount of time and creative energy as often the good design solutions of one bidder can be lost to schools because of other contractual factors. We would also encourage an approach to procurement which allows sufficient time for stakeholder engagement by bidders whilst avoiding time-costly repetition.

We believe that teaching and learning should be at the forefront of decision-making for procurement, which should be led by the needs of teachers and learners. The current funding models in schools promote choice and diversity of

resources and equipment. The resulting competition among companies leads to innovation in product design. This must be encouraged.

Design factors are beginning to achieve a more important status in the procurement process with the development of a CABE Design Review Panel. However, we must acknowledge that the current BSF process does not play to the strengths of our world-class architects, builders and resources industry. This means we can end up with the wrong kind of buildings and resources. CABE's report from summer 2006⁶ highlighted that 50% of new school buildings were of poor design quality. We must learn lessons from this and ensure that whether it be for the building itself or the 'kit' which will go into it, the BSF process fully supports the procurement of well-designed learning environments.

STRATEGIES FOR CHANGE

- *Encourage bidders to join together to carry out stakeholder engagement at the bidding stage. This will avoid unnecessary duplication and allow the client to see first-hand how the bidder interacts with the school.*
- *Ensure that decisions about funding for essential teaching and learning resources are left in the hands of the education experts - the teachers and senior managers of schools, who know what is needed to meet the needs of 'personalised learning' and the individual circumstances of pupils.*
- *Make educators more aware of the 'local choice fund' available in BSF bids and how they can influence its spend.*
- *Consider the approach to design and the design process of a consortia as well as cost-effectiveness.*
- *Enable the process to encourage innovative companies.*
- *One of the new stipulations of BSF funding by Partnerships for Schools and DfES is that local authorities are 'prepared'. Local authorities should be fully supported in the development of their briefs and processes.*
- *Ensure that agreed amounts on equipment and resources are spent, i.e. on those things that really make a difference in the day-to-day life of learners.*
- *Learn lessons from the Academies building programme where projects appear to have benefited by allowing sufficient time during the bidding process for the development of thoughtful designs⁷.*
- *Call on the government to conduct an independent review of the procurement process to ensure speedier and more cost-effective bidding procedures, to include potential current barriers to innovation and the involvement of smaller companies.*

⁵ Message from Tim Byles, Chief Executive, Home page, www.p4s.org.uk

⁶ Assessing secondary school design quality, CABE, July 2006

⁷ 'ICT Output Specification Guidance notes for Local Authorities' P4S, www.p4s.org.uk/documents/BSFICTOutputSpecificationGuidanceAugust2006.doc

⁸ The Academies Programme, National Audit Office, February 2007

DESIGN QUALITY

We recognise the right of the child to learn in an environment which is safe, healthy and achieves the highest quality possible.

Schools must be committed to improving the quality, attractiveness and health of the learning and communal spaces in our schools. Over the past decade, research^{9,10} has demonstrated the significance of environmental and spatial factors on learning and well-being. Poor quality colour, lighting, ventilation, furniture and acoustics can all have a negative effect on student achievement.

BackCare (registered as the National Back Pain Association) found that 'around 50% of school children report back pain at some time and in 8% of adolescents it affects attendance, concentration, handwriting, ability to participate in sport, relationships and well-being'. This is attributed to poor ergonomic design of classroom chairs and desks in schools.

British and European Standards in school furniture do exist but many school-leaders and bursars are not aware of them. BESA's Furniture Group members all produce school furniture to these standards and work with organisations such as FIRA to encourage the promotion of these and related issues.

A poll conducted by School Works in 2006 of over one thousand 11-19 year olds, showed that 63% were not happy with their school buildings and were worried about issues such as security, maintenance and size¹¹. CABE's publication 'The value of good design', outlines the importance of good design, not just for aesthetic purposes but because it can improve quality of life, equality of opportunity and economic growth¹². 70% of people polled as part of the CABE publication agree that well-designed schools improve children's education.

£1.3 billion was spent on learning resources and equipment in English schools in 2006-07¹³. We must ensure that this massive amount of money is not wasted on 'kit' which is not 'fit for purpose' or not chosen specifically by those who use it. Schools must be spending their money on quality, well-designed items from reputable, experienced suppliers. Quality is not an optional extra which can be discarded at the first budget squeeze. Design decisions can affect children's ability to focus, process information and learn.

It is also worth remembering that 'quality environments' can also send vital messages about the perceived worth of a building and its occupants to a community.

STRATEGIES FOR CHANGE

- **Use quality materials, furniture and fittings, which have been shown to save money¹⁴; design quality need not cost more if there is rigorous early planning and research on a project.**
- **Stipulate quality in the brief at the outset of a project. The procurement process must support this drive for quality.**
- **British and European Standards for furniture must be typical in contractual arrangements for new-school build.**
- **Make education managers more fully aware of the importance of British and European Standards in furniture and other equipment.**
- **Place more focus on the importance of codes of practice and the creation of informed purchasers.**
- **Circulate more accessible evidence from research about the benefits of quality design¹⁵.**

SMALL SCHOOL CULTURE

It is clear that a school's size should be determined within the framework of a community's needs, vision, academic goals, traditions and economics. However, BCSE and BESA recognize the importance and development of a small school culture

that fosters relationships and attachments, particularly in the development of secondary schools.

The transition between primary and secondary school can in certain circumstances result in pupils regressing

in their academic results, as well as producing undue anxiety¹⁶. We believe that the problems often related with transition could be alleviated by the development of a small school culture in secondary schools. American studies have shown that student achievement can rise in small schools¹⁷ and well-being and confidence can show improvement too¹⁸.

Developing a small school culture could be as simple as creating 'home bases' or time and space for 'tutor groups' as designated mentors, or tutors could create a sense of belonging in school. This will of course lead to new design and resource requirements, many of which will be untested.

There would appear to be a number of policy drivers which support the development of small school culture. The move towards personalised learning will require a certain shift towards a small school culture as there will be a greater need for a much more personal relationship between learner and teacher/mentor. In addition, the continued development of specialist schools will encourage a small school culture, as learning becomes more tailored to the individual rather than a one size fits all approach.

BCSE and BESA are not suggesting that we necessarily start building physically small schools, but there are a number of projects, specifically in the USA which show that employing a culture in large schools which is more akin to the 'small school ethos', can have beneficial results.



STRATEGIES FOR CHANGE

- **Investigate and disseminate examples of good practice in developing small school culture.**
- **Promote debate on school size and its financial and economic impacts.**
- **Continue work on the design and resourcing implications of a small school ethos.**

⁹ Cash C, 1993, A study of the relationship between school buildings condition and student achievement and behaviour

¹⁰ McGuffey, C. 1982. Facilities in improving educational standards and productivity: The research basis for policy. Ed. H Walberg, Berkely, Calif

¹¹ School Works Mini Poll, School Works, 2006

¹² The value of good design - How buildings and spaces create economic and social value. CABE 2002

¹³ British Educational Suppliers Association (BESA), Resources in English Schools 2007, February 2007

¹⁴ Cottam H, Annesley B, Horne M, 2001, Learning Building, School Works

¹⁵ Cottam H, Annesley B, Horne M, 2001, Learning Building, School Works

¹⁶ The Impact of school transitions and transfers on pupil progress and attainment.

Maurice Galton, John Gray and Jean Rudduck Homerton College, Cambridge, September 1999

¹⁷ Small Schools: Great Strides, Patricia A. Wasley, Michelle Fine, Matt Gladden, Nicole E. Holland, Sherry P. King, Ester Mosak, and Linda Powell, 2000

¹⁸ Knowing and Being Known, Mary Beth Lambert and Louise K. Lowry with Mike Copland, Chrysan Gallucci, and Catherine A. Wallach, 2004

TESTED INNOVATION

BCSE and BESA believe that those involved in school design, product design and the teaching community should together constantly question their preconceptions and thinking with regard to the status quo of school design and resourcing.

As a community, where designers' and contractors' primary aims are to design, build, equip, manage and sustain schools and teachers to support young people in their 'learning journey', we should continue to learn from our triumphs, our mistakes and our neighbours from overseas.

We need to look to innovation and test its effectiveness. For example, ideas around the notion of non-traditional options for school facilities and classrooms, such as museums and civic centres should be explored and developed. Innovations in pedagogy and learning should be shared. A variety of resources for teaching and learning will be essential for these.

Schools should also be supported in the development of strategies around their learning technologies - for example in relation to e-learning, but also around the potential for more innovative forms of pupil assessment, evaluation and staff development and training. Learning on these issues needs to be more widely shared and best practice identified.

Education practitioners should have the space to look at new ways of learning or teaching, and designers should be supported in testing new approaches. BCSE and BESA believe that collaboration between organisations working in the field is vital to ensure that learning is gathered and not lost.

01



The recent report conducted by the National Audit Office on Academies¹⁹ found that there was a lack of post-project review after each Academy is opened. Lessons from this building programme could be extracted for dissemination to other projects in planning or being built.

STRATEGIES FOR CHANGE

- *Continue essential collaboration between organisations to engender shared learning.*
- *Encourage procurement models that lead to choice and diversity and therefore to innovation through competition.*
- *Promote BCSE and BESA as a forum for discussion and debate amongst their members.*
- *Ensure that education professionals are given time and resources to commit to research and learning.*
- *Support design professionals in developing innovation or adapting solutions from other sectors or countries.*
- *Share innovation and best practice on learning technologies.*
- *Encourage the dissemination of learning from the Academy building programme.*



02



03



04



06



08

TAKING ACTION

BCSE and BESA urge all those involved in planning, designing, equipping and building schools to work together to ensure we create the very best for learners, whatever age.

It is time to cast aside old 'silo' methods of working and approach the procurement, building and design and equipping of our schools in a much more 'joined up' way. There is a great need for an honest and open evaluation of what is working and what is not.

We feel that this public policy debate requires the beginning of a united response and understanding across sectors.

We hope that this manifesto initiates a more focused public debate than we have seen so far. We see the document developing and changing over time and would very much welcome your comments.

Please contact manifesto@bcse.uk.net or www.besa.org.uk/manifesto in order to sign up to our Manifesto for Learning Environments, or if you have any comments.

Annex I

The following recommendations draw on some completed studies and research reports from other leading organisations:

Assessing Secondary School Design Quality, Research Report CABE, July 2006
www.cabe.org.uk/default.aspx?contentitemid=1365

21st Century Schools, Building Futures, Stephen Heppell, RIBA/CABE 2004
www.buildingfutures.org.uk/research_project.php?myid=3

Report from the National Summit on school design - A resource for educators and designers, Convened by the American Architectural Foundation and KnowledgeWorks Foundation. 2006 (p7-9)
www.edfacilities.org/pubs/nationalsummit.pdf

Summary and conclusion, Teaching 2012 report of regional seminars, Mike Newby, Training and Development Agency for Schools, 2006 (p23-25)
www.tda.gov.uk/partners/futures.aspx

The Impact of School Environments: A literature review, Steve Higgins, Newcastle University. Commissioned by the Design Council, 2005
www.design-council.org.uk/

2020 Vision
Report of the Teaching and Learning in 2020 Review Group Dec 2006
<http://publications.teachernet.gov.uk/eOrderingDownload/6856-DfES-Teaching%20and%20Learning.pdf>

- Engaging parents and carers in their children's education
- Designing schools for personalising learning
- Skills for personalising learning
- A strategy for systemic innovation
- Ensuring a strong focus on progress for all pupils
- Establishing an entitlement to personalising learning

Academies Programme, National Audit Office, February 2007
www.nao.org.uk/publications/nao_reports/06-07/0607254.pdf

Picture Credits

- 01 BESA
- 02 Hellerup Skole - David Trood
- 03 Hellerup Skole - David Trood
- 04 Jubilee School - Alfred Hall Monaghan Morris
- 05 Jubilee School - Alfred Hall Monaghan Morris
- 06 St Francis of Assisi - Capita Percy Morris
- 07 Raholt School - Kristin Jarmund
- 08 BESA