



This brochure demonstrates Marshalls understanding of the environmental, behavioural and economic issues involved in Educational building projects. It highlights products and features to be considered in creating appropriate landscapes for centres of learning.

We hope that clients, designers, architects and contractors in this specialist area will find it useful.

For more a comprehensive guide to creating better educational landscapes, Marshalls has produced a special, sector specific, book which brings together thoughts and suggestions from leading landscape architects on the design of outdoor learning areas and gives a wide range of products to choose from to extend learning opportunities beyond the classroom.

The book also includes case studies, important BREEAM procurement and sustainable sourcing facts to help make the right choice for your educational landscape.



To order your copy call **0870 200 9200.**

Introduction

We are delighted that Noel Farrer has agreed to contribute a thoughtful introduction to this brochure.



Noel Farrer CMLI

Noel is a CABE (Education) Design Review Panellist, CABE Space Enabler, Member of the Landscape Institute and Council and interim chair of Policy Committee and Director of Farrer Huxley Associates.

The landscape of education is changing fast. The present investment in change is the largest and most ambitious in living memory. For the first time the physical landscape within school grounds is also becoming the focus of debate and opportunity.

As a Landscape Architect I work to create spaces that capture the 'genius loci' of the place and character of the communities they serve; I have always been deflated by the ubiquitous expanses of tarmac and grazed knees synonymous with playground memories. I was lucky to be educated in the country and to have had the benefit of nature but this is the exception to the norm.

Recently through CABE and others an awareness of the role external spaces can play in all aspects of education is being

developed. Evidence and common sense tell us that spaces that stimulate interaction, encourage exploration and increase opportunities for play, sport, informal recreation are beneficial.

To provide an external resource for all aspects of learning is not just nice to have but an essential ingredient to healthy child development. I believe this to be even more important in the light of the reduced opportunities for play and the fear of crime which leads parents and carers to deny opportunities for free play and social interaction outside school.

Our school environments must be designed to deliver places for our children to socialise and play as well as learn and partake in sport. It is outside when interacting with our peers that our identities are formed, not in the library or the classroom.

Employers look for the essential attributes of team working, good communication, flexibility, self-confidence and adaptability in new staff. I believe these attributes are rooted in children's learning to explore the public realm. Given the pressure on children's use of the environment outside of school, we must guarantee the quality of the external spaces in schools to ensure that the next generation can enjoy benefits equivalent to mine of the field and stream beyond the playground.

This brochure and accompanying book contribute to the increasing body of information to specifiers and designers of school grounds. It sets out the basis for the call to maximise investment and quality in external areas and provides support and technical confidence to be able to realise designer's aspirations.

Lam thankful for it

Noel Farrer

A renaissance in school design

The delivery of education in the UK is currently undergoing a major renaissance, the likes of which has never before been seen, and for the first time a more holistic approach is being adopted.

For many years, it has been recognised that well maintained grounds have a profound influence on the ethos of a school and more recent research also demonstrates a clear link between the quality of a school's design and the quality of education delivered. All this implies that the long term success of this wave of new schools and colleges is contingent upon excellence in every aspect of their design and construction.

The particular demands imposed by school life require that both the buildings and the spaces between are fit for purpose and built to last. But more than this, a school's surroundings should be attractive and welcoming to all who use them and ideally engender a sense of pride and belonging that will be reflected throughout every aspect of the school. If the quality of the environment impacts directly upon the behaviour of those who use it, investment in the grounds of a school will surely reap many rewards – staff retention, higher student numbers and an improvement in learning to name a few.



Peacehaven Community School, East Sussex

A sensitively planned and constructed landscape offers countless opportunities for learning, fun, achievement, exercise, visual interest and play, whether as part of a planned and structured curriculum or during breaks in the school day (and as part of an extended services provision). School grounds might be used broadly for activities such as orienteering, camping, or play, yet thoughtfully designed areas will support many more specific activities such as outdoor experiments, storytelling or visual arts. Skilled designers recognise the multi-faceted resource that is available to them and now have the perfect opportunity to provide stimulating outdoor learning environments that have a positive impact both inside and outside the classroom.

value for money is really about the intangible benefits of a well designed landscape not necessarily just low cost products

Another major opportunity for every school lies within the area of environmental issues. For decades, sustainability has been of interest only to fringe and minority groups, yet the application of sustainable practices now drives the design and delivery of every new development. Protection and enhancement of our physical environment might be the prime focus but, with some thoughtful design, sustainable systems also offer students the perfect opportunity to study the natural world around them.

In every respect, it is clear that the quality of a school's landscape is equally as important as that of its buildings. To properly address this premise, there are several factors that are particularly pertinent to educational landscapes and should be considered throughout the process of design and delivery of every school:

the application of sustainable practices now drives the design and delivery of every new development

proposals might need to support a single student quietly reading, a few friends in an intimate chat, or perhaps an entire class for an outdoor lesson.

Children and young people undergo dramatic physical changes throughout their years in education, whether primary or secondary, and thought should be given to the design of all elements within the landscape in order to reflect this. The flexible and adaptable design of items such as seating will encourage full use by students, whatever their age, ability and size.

In primary schools, special items such as character bins, scooter stands and scaled down furniture will make for more colourful and appropriate settings and can bring a sense of fun to what might otherwise be mundane (and underused) items.

The need for flexible and functional spaces

The spaces between a school's buildings must fulfil many needs and support a broad range of activities so a clear hierarchy of spaces is valuable. Patterns of usage vary enormously at different times of the year, week or day and only a highly flexible and multi-functional landscape will effectively service these numerous and diverse requirements.

Transitional areas bear the greatest burden and a section of hardstanding might need to serve many functions at different times of the day, including car and coach parking, delivery access, informal recreation and organised sport. Careful planning and the use of movable furniture and/or retractable bollards might be particularly valuable to control traffic in such areas.

Well-planned grounds have the ability to vary enormously in character and ambience and even a compact landscape has the capacity to sustain a wide variety of moods. Spaces should be available for chilling out or the release of pent-up energy, for energetic play or quiet contemplation, to be alone or with others, to be serious and studious or light-hearted and playful. Even simple seating arrangements require considerable thought;



Designing for inclusion

For a school's facilities to be used fully and effectively, the entire environment must be accessible to every user. DDA issues need to be fully considered from the very start of a project and products specified accordingly to ensure inclusivity for all.

A legible landscape is also critical to everyday mobility within a school, for the benefit of regular staff or students and occasional visitors. A clear wayfinding strategy will ensure that signage is interpreted quickly and appropriately so that movement around the grounds is as intuitive as possible. Much more than signage, orientation systems might take many forms, including subtle indicators built into the landscape.

Balancing safety and security concerns

paramount and a duty of care exists to ensure that every user feels, and indeed is, safe and secure. Where sufficient space is available, tiered circulation arrangements will ensure that pedestrians are segregated and protected from vehicular traffic on the site. However, where spaces are required to be multifunctional, potentially conflicting access may be subtly controlled with cues in the fabric of the landscape and carefully sited outdoor furniture.

The safety of anyone visiting a school is

The correct specification and installation of products will go a long way to assuring the safe use of any landscape, whilst the careful and sympathetic design of external areas is also invaluable in assuring personal security. Young people often crave seclusion and time away from watchful adult eyes, and such privacy is imperative to their development and the promotion of maturity. Intimate spaces and shelters offer the opportunity

to seek out seclusion and a retreat from everyday pressures and have an important role to play. However, issues such as antisocial behaviour and bullying must be addressed and in some settings it will be important to retain clear views and transparency to allow informal oversight of the landscape.

Children often feel their teachers are friendlier when teaching outdoors and, in general, more collaborative learning takes place outside the classroom

Creating the outdoor classroom

There are many ways in which a curriculum can be successfully delivered in an outdoor environment and a school's grounds can be employed to encourage young people to experience much more than books and computers during their time in education. As well as the benefits of fresh air, a change of environment stimulates different senses and enables learning to be undertaken in diverse and new ways, particularly the development of practical and hands-on skills. Children often feel their teachers are friendlier when teaching outdoors and, in general, more collaborative learning takes place outside the classroom. In some subjects and particularly at certain ages, physical movement positively encourages learning and outdoor classrooms also provide the opportunity to undertake particularly noisy or messy experiments!



While there are no rigid guidelines for the creation of such facilities, there are practical considerations that need to be addressed in order for these areas to be fully utilised. Shelter is probably the main requirement – from summer sun and rain at any time of the year! Seating will also enable outdoor lessons to be conducted in comfort – this doesn't mean regimented rows of seats but perhaps simply an area of well drained grass.

Beyond the basics there is huge scope for the creation of specific curriculum gardens where provision may be made for individual study areas. The following core study areas offer opportunities for stimulating gardens that may be planned with key learning outcomes in mind:

- science/technology
- communications
- · maths and IT
- humanities
- art





Harrop Fold High School, Salford



Maximising the health benefits of outdoor learning

The issue of students' health is a critical one that encompasses many aspects in the day to day life of a school. There is widespread recognition that natural environments are beneficial for emotional as well as physical health, and being more in touch with the changing seasons also encourages spiritual development. Simply spending time outdoors in touch with a natural environment relieves anxiety and can have a positive impact on specific issues such as Seasonal Affective Disorder. Access to fresh air and natural light breeds positivity and happy children that have had fun during breaks outside will be more settled and eager to learn during lessons.

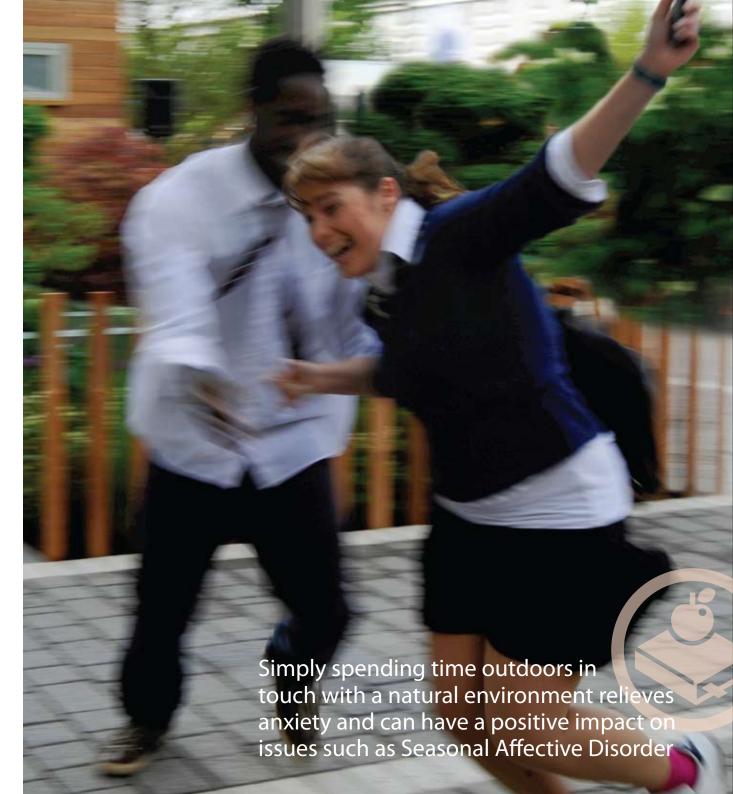
By adopting a more holistic approach to health, schools can support the Government's Healthy Schools Programme in a number of diverse ways, some of which follow:

Healthy eating

The inclusion of a vegetable garden provides an opportunity to educate students about the sources of many everyday foods and the produce harvested might even find its way into cookery lessons. Learning to nurture fruit and vegetable plants through simple everyday activities also teaches important lessons about caring for the natural environment.

Sport

Physical exercise is an important aspect of school life that need not require too much in the manner of equipment or space. Specific areas can be designed to support different types of physical activity and although playing fields are highly desirable to any school, even the most limited of school grounds can support a trim trail and hard surfaced areas for 'street athletics'.



Play

Play is an essential element of every child's life and integral to their health and development. Stimulating play provides opportunities to explore the world, enjoy healthy physical, emotional and cognitive growth, solve problems, test abilities and develop social skills in fun and unstructured ways. School grounds are, for many young people, the only safe outdoor environment to which they have regular access.

While safety is an important consideration, young people also need opportunities to challenge and stretch themselves in order to learn from their mistakes. The overriding aim must be to create exciting landscapes where risks have been considered and managed but not entirely removed. There is currently a very welcome move away from restrictive and overly designed equipped play areas towards more natural and ecologically based designs that provide unique physical and mental challenges. These areas provide spontaneous opportunities for play. Through simple investigation and exploration and by using items such as boulders, logs and contoured ground children are able to use components as they see fit rather than in any prescribed manner. Given a choice, many children play by doing nothing in particular!

Leisure

After a tough double maths session, sometimes all that is required is a space for chilling out and switching off! Such needs should not be forgotten when developing a school masterplan as the provision of relaxation areas is vitally important. The recreational needs of young people differ widely and while some may need space to run around or kick a football, others might simply want to sit, chat and read.





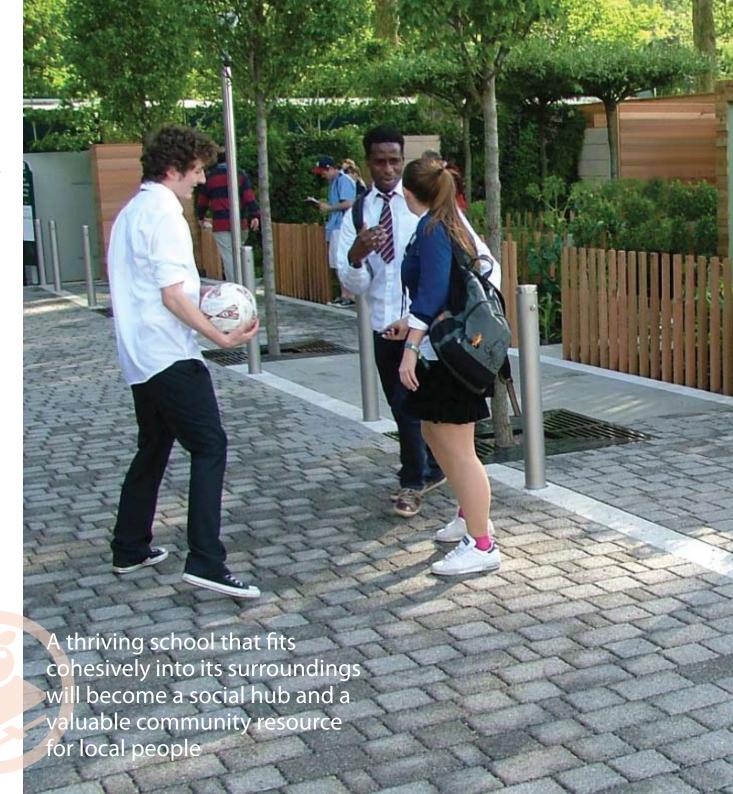


Encouraging social interaction

The manner in which a school or college integrates into the community that surrounds it is key to its ultimate success. A thriving school that fits cohesively into its surroundings will become a social hub and a valuable community resource for local people.

As with any development, first impressions count, but another important aspect of the design of school grounds is that they are distinctive and reflect the local identity. Thoughtful planning will instil a clear sense of place, which in turn imparts a feeling of belonging in those who use the school. Another important facet of the design is the reflection of cultural diversity both within the school and in its neighbouring community.

Wherever feasible, students' involvement in the planning, building and caring of school grounds can bolster their confidence and demonstrates techniques for taking charge and bringing about change. Important lessons may be learned about ownership, citizenship and community, and when areas are valued through this level of involvement, the likelihood of vandalism and destructive behaviour is considerably reduced.





For the most effective education to take place, it is widely recognised that teaching techniques should encompass all the senses and learning outside the classroom provides wonderful opportunities for the full spectrum of sensory experiences. Outdoor spaces support holistic teaching techniques for a whole body experience that is often missing during traditional lessons and the entire learning experience can be made more tangible through a multi-sensory approach.

There are many possibilities for the incorporation of the five senses within a typical curriculum:

- New tastes can be discovered through growing fruit and vegetables
- The use of plant fragrances to relax or energise
- Artwork, particularly sculptures, are especially well suited for outdoor display
- Encouraging a more tactile enjoyment of the landscape through the use of water, tactile plants and textural contrasts in hard materials
- Sound can be used to bring the outdoors to life through music trials

The tenets of colour therapy in particular might be adopted to support certain activities and encourage specific behaviours in pupils. Selected colour(s) may be expressed through every element of the landscape whether paving, furniture or planting but, contrary to popular belief, many young people do not naturally gravitate toward the primary colours, so a subtle and sophisticated palette may be more appropriate.

Key colours are:

- **blue** for relaxation, tranquillity and chilling out
- red for energy, movement and self-confidence
- yellow to increase awareness and encourage learning
- green for healing, balance and growth
- orange to encourage resourcefulness and a positive attitude
- purple to stimulate the imagination, spirituality and creativity.



Sustainable spaces to promote sustainable learning

Every school landscape, no matter how small, provides wonderful opportunities for the study of the natural environment and the inclusion of sustainable techniques that illustrate the importance of planet-saving activities. Whether a stand-alone green space in the midst of a city or a rural school with extensive grounds, there are countless opportunities to demonstrate sustainable lifestyles and encourage a better understanding of the link between human activities and issues such as climate change.

Engaging young people and children at an early stage in sustainability issues creates a sense of awareness and increases their involvement in environmental projects. Young people naturally view the world around them with a sense of awe and are generally highly supportive of projects that support the conservation of the natural habitats around them.

Possible projects might include:

- Wildlife conservation through the addition of simple items such as bird boxes, a small pond and mini beast areas
- Photovoltaic panels or wind turbines to capture natural energy for re-use as electricity within the school
- Recycling practical demonstrations from the separation of recyclable waste to composting bins within a productive area
- The provision of secure cycle storage will support and encourage a sustainable transport strategy for the school
- The entire grounds become a practical teaching resource in any number of ways, for instance studying the unique habitats and biodiversity of a neighbourhood
- Green roofs even a shed can support a green roof that illustrates the value of non-traditional building techniques.

Skilled designers recognise the multi-faceted resource that is available to them and now have the perfect opportunity to provide stimulating outdoor learning environments that will have a positive impact both inside and outside the classroom.

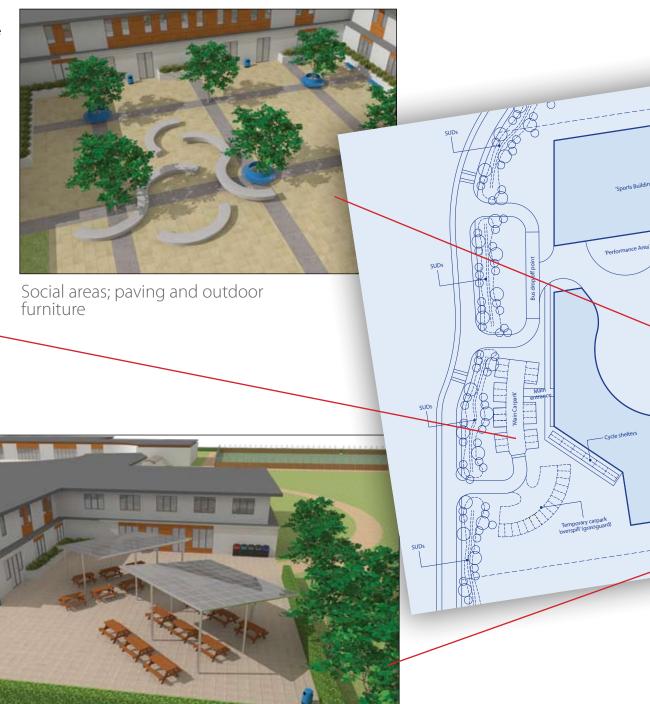
Transitional areas bear the greatest demands and a section of hardstanding may serve many functions at different times of the day, including car and coach parking, delivery access, informal recreation and organised sport.



Functional space; permeable block paved car parks, cycle stands and entrance canopies

Intimate spaces and shelters offer the opportunity to seek out seclusion and a retreat from everyday pressures and have an important role to play.

Outdoor eating; seating, paving, recycling bins and canopies



Bringing these design values to life

A thoughtfully planned and constructed landscape offers countless opportunities for learning, fun, achievement, exercise, visual interest and play

The inclusion of allotment gardens provides an opportunity to educate students about the sources of many everyday foods. Learning to nurture fruit and vegetable plants through simple everyday activities also teaches important lessons about caring for the natural environment.



School gardens; raised planter kits, picnic tables, paving and greenhouses

Why choose Marshalls for Educational Landscaping Contracts

How the Specialist Businesses Work

As Britain's leading manufacturer of hard landscaping we have long recognised the needs of specifiers to deliver'the finished article,' on time, on budget and fit for purpose.

Marshalls offer a fully integrated service from specialist businesses within the Marshalls Group. These specialists provide a menu of services that include paving, block paving, walling, water management, kerb, traffic management, sectional buildings, greenhouses, outdoor furniture and structures.

How the Support Network Works

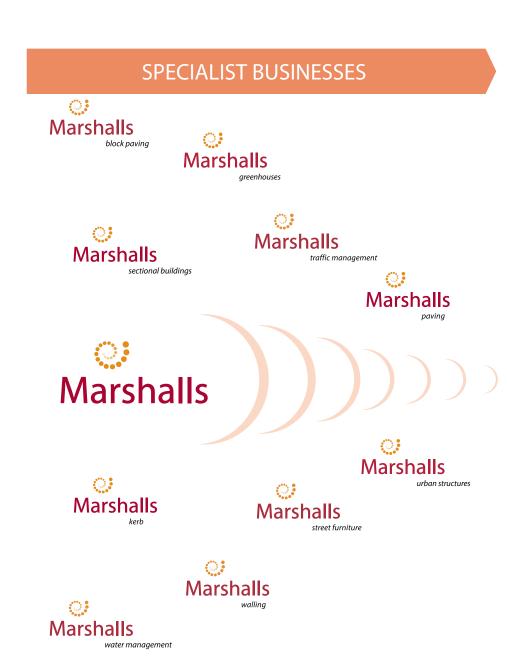
Dedicated project consultants, not salespersons, are assigned to help, advise and manage whichever products are specified and to co-ordinate the contributions from the chosen Marshalls specialists. Free technical advice and guidance is always readily available, the objective is to refine the specification and realise savings in cost and time for the client.

This support network helps track all aspects of the project including legals and compliance, planning, deliveries and budgets.

Bespoke Option

Creating unique and inspiring schemes often requires that extra element of design flair and knowledge. Marshalls has the inhouse expertise to assist designers in creating bespoke product features within their landscape projects.

We can turn a good concept into a great reality, using our extensive experience and integrated product offer to create cohesive and workable solutions.



Marshalls believe in freeing up the client to project manage the bigger picture, safe in the knowledge that they have a supplier in place able to provide all of the landscape product services required. For comprehensive information on Marshalls Educational Landscapes products visit **www.marshalls.co.uk/select**.



SUPPORT NETWORK

Design Team

- Office based Design Engineers
- State of the art drainage design software
- Permeable and Linear Pavement Design
- · Structural Pavement Design
- Product Take Off (Design dependant)
- 3D Component Design
- Layout sketches to aid site installation
- · Paving Layouts
- Schedules detailing required components (design dependant).

Technical Engineers

- Regionally based Technical Engineers
- Site support
- Onsite designs
- Onsite take offs
- CPD's
- Contract Management
- Structural and Hydraulic calculations
- Easy to order from schedules with item codes (design dependant)
- · Installation guidance and advice.

PROJECT

- Project support, inception to completion
- Design advice on material selection, construction, design, costing, and product integration
- Fully integrated product solutions
- Product and image sampling
- Project liaison with Marshalls Contract Managers and technical design services
- · Single point of contact for specifiers.

Project Consultants

- Supply management of Marshalls commercial products
- Direct liaison with contractor and sub contractor during tender and construction
- Management of material scheduling and 'direct to site' deliveries
- Responsibility for pricing and negotiation of a project
- Single point of contact for contractor and merchant.

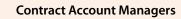
BESPOKE OPTION













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