

## Schools For The Future Designing School Grounds

*The United States has about \$2 trillion tied up in aging school facilities. School districts throughout the country spend about \$12 billion every year keeping this infrastructure going. Yet almost all of the new money we pour into school facilities reinforces an existing—and obsolete—model of schooling. In **Blueprint for Tomorrow**, Prakash Nair—one of the world’s leading school designers—explores the hidden messages that our school facilities and classrooms convey and advocates for the “alignment” of the design of places in which we teach and learn with twenty-first-century learning goals. **Blueprint for Tomorrow** provides simple, affordable, and versatile ideas for adapting or redesigning school spaces to support student-centered learning. In particular, the author focuses on ways to use current spending to modify existing spaces, and explains which kinds of adaptations offer the biggest return in terms of student learning. The book is organized by area—from classrooms to cafeterias—and is richly illustrated throughout, including “before and after” features, “smart idea” sidebars, and “do now” suggestions for practical first steps. It outlines key principles for designing spaces that support today’s learning needs and includes tools to help educators evaluate the educational effectiveness of their own spaces. **Blueprint for Tomorrow** will open educators’ eyes to the ways that architecture and learning are entwined and will challenge them to rethink the ways they teach and work together.*

*This book is based on the workshop that kickstarted the NATO Science Committee Special Programme on Advanced Educational Technology. We invited the leaders in the field to attend this inaugural meeting and were delighted by the quality of the attendance, the papers delivered at the workshop and this book. Many of the authors have subsequently run other meetings funded by the Special Programme and have, or are in the process of, editing books which focus on particular topics. This book covers all the major themes in the area ranging from fundamental theoretical work to empirical studies of state of the art technological innovations. Tim O’Shea chaired the NATO Survey Group which planned the Programme and the subsequent Panel which disbursed funds in the first two years of the Programme. He would like to thank the other group and panel members, namely, Professor N Balacheff, Professor D Bjomer, Professor H Bouma, Professor P C Duchastel, Professor A Dias de Figueiredo, Dr D Jonassen and Professor T Liao. He would like to offer his special thanks to Dr L V da Cunha the NATO Programme Director for his unflinching support and patience. Eileen Scanlon was the Director of the Workshop which is the basis of this book. She offers heartfelt thanks to the contributors and to the following who provided practical help with the meeting or the production of this book: Mrs Pauline Adams, Dr Mike Baker, Mrs Kathy Evans, Mrs Patricia Roe, Mr Dave Perry and Ms Fiona Spensley.*

*Sustainability is a powerful force that is fundamentally reshaping humanity’s relationship to the natural world and is ushering in the Age of Integration. The move from well-intentioned environmental friendliness to the higher bar of integral sustainability and regenerative design demands a new type of design professional, one that is deeply collaborative, ethically grounded, empathically connected and technologically empowered. As a response, this book argues for a great leap forward in design education: from an individualistic and competitive model casually focused on greening; to a new approach defined by an integral consciousness, shaped by the values of inclusivity and cooperation, and implemented by a series of integrative behaviors including: an ethically infused design brief a co-creative design process on-going value engineering pre-emptive engineering design validation through simulation on-line enabled integrated learning the use of well vetted rating systems. This book contains the integral frameworks, whole system change methodologies and intrinsic values that will assist professors and their students in an authentic and effective pursuit of design education for a sustainable future.*

*First published in 2007, this book examines the designs of seventeen architecture and design schools and answers questions such as: How has architectural education evolved and what is its future? Are architectural schools discernible types of designs and what are their effects on those who experience them? What lessons can be learned from evaluations of recently completed school buildings and what guidance do they provide for the design of future ones? Included in the multiple approaches to evaluation are examinations of the history of architectural education and building form; typologies of school for architecture; and the systematic user evaluations of the aesthetics, function, and technology which reveal the strengths to encourage and weaknesses to avoid in future designs. While offering specific guidelines for schools of design, it also includes findings that extend beyond the walls of design schools and can be applied to everything from the interiors of educational and campus buildings to planning offices and gathering places to build communities. This book will make readers more aware of problems in architectural interiors and suggest ways to make interiors work better for the building occupants.*

### Design of Sustainable Schools

#### Learning to Design the Schools of our Future

#### A Focus on Change

#### Insights and Inspiration from Teachers across America

### Schools for the Future

Even on good days, teaching is a challenging profession. One way to make the job of college instructors easier, however, is to know more about the ways students learn. How Humans Learn aims to do just that by peering behind the curtain and surveying research in fields as diverse as developmental psychology, anthropology, and cognitive neuroscience for insight into the science behind learning. The result is a story that ranges from investigations of the evolutionary record to studies of infants discovering the world for the first time, and from a look into how our brains respond to fear to a reckoning with the importance of gestures and language. Joshua R. Eyler identifies five broad themes running through recent scientific inquiry--curiosity, sociality, emotion, authenticity, and failure--devoting a chapter to each and providing practical takeaways for busy teachers. He also interviews and observes college instructors across the country, placing theoretical insight in dialogue with classroom experience.

What will the schools of the future look like? What will guide their design, and what is happening now to create them? As we enter the age of disruption and hyperchange, it has become increasingly clear that our education systems are not adequate to the task of enabling young people to thrive in a very different future. FutureSchool offers system leaders, principals, and teachers research-based design principles upon which the evolution of schools might be based. Shaped by an awareness of changing economies, technology, and the climate emergency, it suggests specific ways that leaders can address the challenges of moving forward, grasping the opportunities presented by the disruption of the COVID-19 pandemic. Presenting six ‘archetypes for the future’ – key missions that are central to the future of humanity – it offers inspiring examples of practice that are not just theoretical but well-advanced in schools across the world, practice that is grounded in principles that are central to a new learning paradigm. This book offers an answer and presents a vision that is engaging, inspiring, and intent on enabling success for all learners. This book will provide inspiration and practical guidance for leaders, teachers, and parents who want to see schools rapidly evolve to become the institutions we really need.

This book brings together the notions of material school design and educational governance in the first such text to address this critical interrelationship in any depth. In addressing the issue of governance through analysing current and historical material school designs, it looks at the intersection of politics, economics, aesthetics and pedagogical ideas and practices. More specifically, it explores and unfolds educational governance as it is constituted, materialized and transformed in and through material school designs. It does so by studying a range of issues: from the material and aesthetic language of schooling to the design of the built environment, from spatial organization to the furnishing and equipment of classrooms, and from technologies of regulation to the incorporation of tools of learning. The book presents examples from Europe, Latin and Central America and the United States, and relates to the past, present and future of governance and school design. It focuses on design processes and on designers/architects and people involved in the planning of school design, as well as on school leaders, teachers and pupils adopting, inhabiting and re-shaping them in everyday school life. Furthermore, the book discusses how to study governance by material school design, and how to act upon governance by material design on wishful, actual and ethical terms.

Designing Schools explores the close connections between the design of school buildings and educational practices throughout the twentieth century to today. Through international cases studies that span the Americas, Europe, Africa and Australia, this volume examines historical innovations in school architecture and situates these within changing pedagogical ideas about the ‘best’ ways to educate children. It also investigates the challenges posed by new technologies and the digital age to the design and use of school places. Set around three interlinked themes – school buildings, school spaces and school cultures – this book argues that education is mediated or framed by the spaces in which it takes place, and that those spaces are in turn influenced by cultural, political and social concerns about teaching, learning and the child.

#### Designs for Learning Communities

#### Cases on Academic Program Redesign for Greater Racial and Social Justice

#### Designing Schools for Extended Services

#### Lessons Learned from Schools of Architecture

#### Designing the Sustainable School

#### How the Material World Shapes Independent Kids

Successfully implement a blended learning program with this step-by-step guide! The Blended Workbook: Learning to Design the Schools of Our Future is the practical companion to Blended: Using Disruptive Innovation to Improve Schools. Through real-world implementation exercises it will help you get the most out of the text. From understanding the basics of blended learning to fine-tuning your current program, this workbook gives you hands-on practice that will expand your knowledge base and help you develop a plan for your own classroom or school to create a student-centered education design that personalizes for all students. Key points drawn from over 50 case studies illustrate what works, what doesn't, and how to build a successful blended-learning program. This workbook's organizational structure allows you to jump in at any point to access field-tested exercises that will deepen your understanding of the design process. Blended learning is inspiring K-12 educators with an improved student experience that includes the best of face-to-face and online learning formats to personalize learning and deepen engagement. This workbook provides hands-on training exercises that help you design and implement an effective program with practical guidance from the experts. You will: Examine case studies that illustrate blended learning Solidify your understanding of effective blended-learning design Complete illustrative exercises to further your implementation expertise Evaluate the many paths blended learning can take, and implement what works best for your students Blended learning is a proven, highly rewarding learning strategy. However, the success of your program relies on proper design and implementation. As a companion to Blended this hands-on workbook helps you reap the benefits and strengthen your expertise.

Uniquely Future Schools not only provides design guidance on themes in schools architecture and a wealth of recent innovative projects drawn from the UK but also an understanding of the socio-political and economic context that any practice must work within when taking on a schools project. It balances beautiful visuals and innovative case studies with in-depth discussion of the thought processes and issues to consider in good school design. Reflecting on ambitious projects during the BSF period of high investment and post-BSF creativity and innovation during austerity it considers the next phase of school design shaped by growing student numbers, diversity in project types and routes and the growing opportunities for smaller practices as work on existing buildings becomes more common.

A thought-provoking guide to help you lean in to the discomfort of the unknown to turn creative opportunities into intentional design, from Stanford University's world-renowned d.school. "Navigating Ambiguity reminds us not to run from uncertainty but rather see it as a defining moment of opportunity."—Yves Béhar, Founder and CEO, fuseproject A design process presents a series of steps, but in real life, it rarely plays out this neatly. Navigating Ambiguity underscores how the creative process isn't formulaic. This book shows you how to surrender control by being adaptable, curious, and unbiased as well as resourceful, tenacious, and courageous. Designers and educators Andrea Small and Kelly Schmutte use humor and clear steps to help you embrace uncertainty as you approach a creative project. First, they explain how the brain works and why it defaults to certainty. Then they show you how to let go of the need for control and instead employ a flexible strategy that relies on the balance between acting and adapting, and the give-and-take between opposing approaches to make your way to your goal. Beautiful cut-paper artwork illustrations offer ways to rethink creative work without hitting the usual roadblocks. The result is a more open and satisfying journey from assignment or idea to finished product.

This book shows educators how to encourage creativity, communication, innovation, and collaboration in students by incorporating engineering design process thinking into existing classwork. Strategies for supporting engineering practices that foster creative problem-solving and critical thinking are among the topics discussed.

#### A Journey to Create the Future

#### How Schools Around the World are Applying Learning Design Principles For a New Era

#### Inspirational Design for PE & Sport Spaces

#### School Design Together

#### Design for the Changing Educational Landscape

#### How Engineering Builds Creative Critical Thinkers in the Classroom

#### Introduces key issues in the design of learning spaces with case studies and guidance on refurbishment and new building projects

*The postwar American stereotypes of suburban sameness, traditional gender roles, and educational conservatism have masked an alternate self-image tailor-made for the Cold War. The creative child, an idealized future citizen, was the darling of baby boom parents, psychologists, marketers, and designers who saw in the next generation promise that appeared to answer the most pressing worries of the age. **Designing the Creative Child** reveals how a postwar cult of childhood creativity developed and continues to this day. Exploring how the idea of children as imaginative and naturally creative was constructed, disseminated, and consumed in the United States after World War II, Amy F. Ogata argues that educational toys, playgrounds, small middle-class houses, new schools, and children’s museums were designed to cultivate imagination in a growing cohort of baby boom children. Enthusiasm for encouraging creativity in children countered Cold War fears of failing competitiveness and the postwar critique of social conformity, making creativity an emblem of national revitalization. Ogata describes how a historically rooted belief in children’s capacity for independent thinking was transformed from an elite concern of the interwar years to a fully consumable and aspirational ideal that persists today. From building blocks to Gumby, playhouses to Playskool trains, Creative Playthings to the Eames House of Cards, Crayola fingerpaint to children’s museums, material goods and spaces shaped a popular understanding of creativity, and **Designing the Creative Child** demonstrates how this notion has been woven into the fabric of American culture.*

*From building blocks to city blocks, an eye-opening exploration of how children's playthings and physical surroundings affect their development. Parents obsess over their children's playdates, kindergarten curriculum, and every bump and bruise, but the toys, classrooms, playgrounds, and neighborhoods little ones engage with are just as important. These objects and spaces encode decades, even centuries of changing ideas about what makes for good child-rearing--and what does not. Do you choose wooden toys, or plastic, or, increasingly, digital? What do youngsters lose when seesaws are deemed too dangerous and slides are designed primarily for safety? How can the built environment help children cultivate self-reliance? In these debates, parents, educators, and kids themselves are often caught in the middle. Now, prominent design critic Alexandra Lange reveals the surprising histories behind the human-made elements of our children's pint-size landscape. Her fascinating investigation shows how the seemingly innocuous universe of stuff affects kids' behavior, values, and health, often in subtle ways. And she reveals how years of decisions by toymakers, architects, and urban planners have helped--and hindered--American youngsters' journeys toward independence. Seen through Lange's eyes, everything from the sandbox to the street becomes vibrant with buried meaning. **The Design of Childhood** will change the way you view your children's world--and your own.*

#### Schools for the FutureDesigning School GroundsThe Stationery Office

#### Design Proposals from Architectural Psychology

#### Learning Transformed

#### Designing the Future

#### The Design of Learning Spaces

#### The Design of Childhood

#### Future Schools

The time is ripe for interdisciplinary, collaborative approaches to school design. Whatever the current funding limitations, we still need to think about how we design, organise and use space in schools for learning and teaching. This edited book ensures that we don't start from ground zero in terms of good design. Including chapters from researchers and practitioners in architecture and education, it assesses, describes and illustrates how education and environment can be mutually supportive. The centrality of participation and collaboration between architects, educators and school users holds these diverse contributions together. The book embodies the practice as well as the principle of interdisciplinary working. Organised in two parts, this volume considers how schools are designed and used with chapters looks at current and past school environments in the UK, US and Europe. It then questions how the learning environment can be improved through participatory design processes with contributors from design and education backgrounds offering both theoretical understanding and practical ideas. Written without subject-specific jargon or assumptions, it can be used by readers from either an architectural or educational background, bridging the on-going communication gap between education and design professionals. Design and education professionals alike will appreciate the:

- practical information which shows how to change or improve a learning environment
- focus on evidence-based research
- case studies and chapter topics including schools from across the primary and secondary sectors.

The aim of this guide is to inspire the best possible designs for school grounds. It covers all school sectors, including special educational needs, looking at both the development of existing space and new build. Using examples from recent developments it also shows how well designed grounds can enhance learning, encourage well-being and influence behaviour. The three main sections cover: the process of developing school grounds; designing and building; supporting school ground development. It is written for everyone involved in the process, including teachers, governors, architects, local authorities and sponsors. Although not a technical guide, it contains a references to more specific information

Explains how to implement new school library standards and demystify changes resulting from technology, discusses budgeting and special needs of children, and includes ten conceptual plans for actual school libraries.

Drawing on the perspectives of architectural psychology, set against the historical development of school building in the United States, Japan and Germany, the authors' vision is to create places where we would want to relive our own school days. The book takes the position that user design, control of stress factors and control of communication (privacy, retreats) should be allowed to modify the original architectural design to flexibly accommodate future changing requirements. The development and application of criteria for assessing functional, aesthetic, social-physical, ecological, organizational and economical aspects to various parts of the school complex call for a common language for the design process. The appendix presents 24 innovative schools from countries in five continents.

Designing Small Schools of the Future Using High Tech Learning Communications

Blueprint for Tomorrow

Design for Elementary and Secondary Schools

Learning Spaces

Designing a School Library Media Center for the Future

How Humans Learn

This publication contains 12 case studies of sustainable school building design, with practical examples of primary and secondary schools around the country that have addressed the environmental challenges of sustainable development to deliver school buildings that use less energy and water, that minimise waste and avoid the use of pollutants, that protect and enhance habitats for plants and wildlife, and that meet wider community needs. This guide is designed to be accessible to the whole school community, but it is aimed particularly at professionals such as designers and local authority clients. It also addresses the refurbishment of existing schools as many sustainability techniques used in the design of new schools can be applied to existing schools, and vice versa. More information on DfES policies relating to sustainable development can be found at: <http://www.teachernet.gov.uk/sustainableschools> and at <http://www.teachernet.gov.uk/sustainabledesign>

By examining the contemporary situation of the Design School from a global perspective, this book explores how the structure of design learning and teaching, research and practice, is being transformed by a number of internal, external, and contextual factors and the implications of these factors for future iterations of the Design School. Exploring contemporary design education, this book asks whether Design Schools are shaping a new type of designer, or if tomorrow's designers will emerge from other professions such as business, health care, education, and computing, where design 'thinking' is now regularly applied. The book is proposed at a time when governments and markets across the world are reshaping education. In a time of rapid and intensive change, it looks internationally at the shape of the Design School of the future. The book has been developed from a series of summits that explored the future of the contemporary Design School informed by international perspectives from high level invited speakers from design education, culture and industry who were asked: \* How can a Design School in the age of the Anthropocene best prepare future designers for this complex world? \* How can the Design School maximize the potential opportunities suggested by this future, uncertain world at a time of rapid and intensive change? \* Having changed the planet how should the Design School react to the planet changing us? The three summits reflect three significant turns in the contemporary Design School. The first focused on the current issues surrounding the Design School from the academic perspective. The second summit examined the increasingly intensive relationship between industry and Design Schools. The third summit focused on the increasingly close relationship between the Design School and the Cultural Sector. The book includes essays from the expanding landscape of the Design School, including educational providers, the design museum sector, the international design festival circuit and influential practitioners engaged in design education. The essays in this book provide a valuable, comprehensive examination of the future of the Design School and render a unique forecast of its probable trajectory.

Drawing from a variety of disciplines, including design, economics, public policy, organizational theory, science and technology studies, sociology, and even cognitive psychology and epistemology, The Fifth Wave is a must-read for anyone concerned with the future of higher education in our society.

Get the comprehensive guide to the sustainable design of schools. The elementary and secondary school buildings and campuses built today are the schools of the future. Sustainable School Architecture is a guide to the planning, architecture, and design of schools that are healthy, stimulating, and will conserve energy and resources. Written with the needs of architects, construction professionals, educators, and school administration in mind, the book provides a road map for sustainable planning, design, construction, and operations. By its very nature, a school is often the centerpiece of its community and, therefore, well positioned to take the lead in influencing environmental awareness. Building on this point, Sustainable School Architecture shows how eco-friendly practices for school construction can create an environment that young students will emulate and carry into the world. Written by experts on sustainable school design, this book: Focuses on the links between best sustainable practices and the specific needs of educational institutions. Has nineteen international case studies of the best contemporary sustainable schools located in urban, suburban, and rural communities in temperate, tropical, and extreme climate zones. Contains valuable information on the California Collaborative for High Performance Schools (CHPS) and the Leadership in Energy and Environmental Design (LEED®) rating system. Serves as a resource for incremental modernization and operation strategies as well as comprehensive transformation. Offers tips on running an integrated, community-based design process with support information on the materials and systems of the sustainable school. Includes contributions by experts on approaches to the sites, systems, maintenance, and operation of sustainable schools. With a practical overview of how sustainability can be achieved in new and existing schools, and how to maintain this momentum in the years ahead, this important book provides architects with detailed guidance for designing healthier learning environments to help usher in a more promising future.

New Directions in Educational Technology

The Evolution of American Higher Education

The Blended Workbook

Navigating Ambiguity

Space, Place and the Future of Learning

Redesigning Schools for Student-Centered Learning

*Faculty and students confront persistent racial, economic, and social inequities in higher education locally, nationally, and globally. To counter these inequities, there has been a recent focus on universities providing an inclusive curriculum that serves the needs of students from a wide range of backgrounds. Inclusive and equitable courses and instruction are crucial in today's world as calls for racial and social justice grow, particularly in higher education. Universities and instructors must take action and make changes to best serve their students. Cases on Academic Program Redesign for Greater Racial and Social Justice provides an equity-oriented practical guide for those in higher education who are engaged in the work of curricular reform or program development. It also explores practices and approaches to curriculum development that consider program quality and equitable outcomes as mutually beneficial and necessary outcomes. Covering a range of topics such as antiracism and mindful hiring, it is ideal for teachers, instructional designers, curricula developers, administrators, academics, professors, educators, researchers, those working in higher education, and students.*

*This book delves into two divergent, yet parallel themes; first is an examination of how educators can design the experiences of learning, with a focus on the learner and the end results of education; and second, how educators learn to design educational products, processes and experiences. The book seeks to understand how to design how learning occurs, both in the instructional design studio and as learning occurs throughout the world. This will change the area's semantics; at a deeper level, it will change its orientation from instructors and information to learners; and it will change how educators take advantage of new and old technologies. This book is the result of a research symposium sponsored by the Association for Educational Communications and Technology [AECT].*

*The authors bring together essential information on every stage of the process of creating a new public educational facility for boards of education, school building committees, district superintendents, and other decision makers. This book features case studies of recent exemplary magnet and specialized school construction projects, and provides a detailed educational specification that's genuinely future-oriented.*

*This bulletin examines the range of issues involved in the design of school buildings, in order to promote a positive learning environment which serves the needs of pupils and the wider community. It considers how to improve the design of existing schools, as well as ensure that new school buildings are well designed and built. It provides practical advice and contains a range of illustrated examples taken mostly from real school projects. The bulletin is divided into three sections. Part One considers the key issues for the 21st century school, such as changes to the curriculum and the growth of IT, lifelong learning, and the inclusion of pupils with special educational needs and disabilities. Part Two examines the design implications for these developments relating to the use of space, environmental factors, planning issues and sustainability. Part Three considers how to achieve design quality and value for money in the building process.*

*Creating Opportunity in a World of Unknowns*

*Systems Design of Education*

*The Fifth Wave*

*Creating the Future of Educational Technology*

*What School Could Be*

*Sustainable School Architecture*

With all that we know about how students learn, the nature of the world they will face after graduation, and the educational inequities that have existed for centuries, maintaining a traditional, one-size-fits-all approach to teaching and learning is tantamount to instructional malpractice. International security, the success of global economies, and sustainability as a global society all depend on the success of our education system in the years to come. It's our obligation to prepare our students for their future—not our past. Authors Eric C. Sheninger and Thomas C. Murray outline eight keys—each a piece of a puzzle for transforming the K-12 education system of teaching and learning—to intentionally design tomorrow's schools so today's learners are prepared for success . . . and stand ready to create new industries, find new cures, and solve world problems. The traditional model of schooling ultimately prepares students for the industrial model of the past. If we want our students to become successful citizens in a global society, we must dramatically shift to a more personal approach. Failure is not an option. We can no longer wait. Let Learning Transformed show you how you can be a part of the solution. The authors encourage you to use the hashtag #LT8Keys to continue the discussion online.

An inspiring account of teachers in ordinary circumstances doing extraordinary things, showing us how to transform education What School Could Be offers an inspiring vision of what our teachers and students can accomplish if trusted with the challenge of developing the skills and ways of thinking needed to thrive in a world of dizzying technological change. Innovation expert Ted Dintersmith took an unprecedented trip across America, visiting all fifty states in a single school year. He originally set out to raise awareness about the urgent need to reimagine education to prepare students for a world marked by innovation—but America's teachers one-upped him. All across the country, he met teachers in ordinary settings doing extraordinary things, creating innovative classrooms where children learn deeply and joyously as they gain purpose, agency, essential skillsets and mindsets, and real knowledge. Together, these new ways of teaching and learning offer a vision of what school could be—and a model for transforming schools throughout the United States and beyond. Better yet, teachers and parents don't have to wait for the revolution to come from above. They can readily implement small changes that can make a big difference. America's clock is ticking. Our archaic model of education trains our kids for a world that no longer exists, and accelerating advances in technology are eliminating millions of jobs. But the trailblazing of many American educators gives us reasons for hope. Capturing bold ideas from teachers and classrooms across America, What School Could Be provides a realistic and profoundly optimistic roadmap for creating cultures of innovation and real learning in all our schools.

Having designed more than 75 K-12 school projects, and with a long-standing commitment to sustainability and a passion for architecture, Alan Ford is perfectly positioned to present this illuminating collection of sustainable school projects from around the world. Designing the Sustainable School is a compendium of ideas illustrating how some very talented architects and committed facility planners are meeting the challenge of creating better schools for the 21st century. They are creating schools that are eco-friendly, embody high-performance design principles, are rich in architectural character, and enhance the health and well-being of students and teachers. The projects represent a wide range of design solutions, aesthetics, location, and scale, ranging in size from the Aga Khan Award-winning three-room schoolhouse in Burkina Faso by Diebedo Francis Kere, to the 2500-student, 260,000-square-foot high school in Santa Ana, California by LPA Architects. Each of the 45 featured projects is presented with an overview of the components of the high-performance "tool kit" employed by architects to achieve sustainable design goals. Collectively, these demonstrate the breadth of tools that today's architects can employ to build a sustainable future for our children.

The whole landscape of space use is undergoing a radical transformation. In the workplace a period of unprecedented change has created a mix of responses with one overriding outcome observable worldwide: the rise of distributed space. In the learning environment the social, political, economic and technological changes responsible for this shift have been further compounded by constantly developing theories of learning and teaching, and a wide acceptance of the importance of learning as the core of the community, resulting in the blending of all aspects of learning into one seamless experience. This book attempts to look at all the forces driving the provision and pedagogic performance of the many spaces, real and virtual, that now accommodate the experience of learning and provide pointers towards the creation and design of learning-centred communities. Part 1 looks at the entire learning universe as it now stands, tracks the way in which its constituent parts came to occupy their role, assesses how they have responded to a complex of drivers and gauges their success in dealing with renewed pressures to perform. It shows that what is required is innovation within the spaces and integration between them. Part 2 finds many examples of innovation in evidence across the world - in schools, the higher and further education campus and in business and cultural spaces - but an almost total absence of integration. Part 3 offers a model that redefines the learning landscape in terms of learning outcomes, mapping spatial requirements and activities into a detailed mechanism that will achieve the best outcome at the most appropriate scale. By encouraging stakeholders to creating an events-based rather than space-based identity, the book hopes to point the way to a fully-integrated learning landscape: a learning community.

Design Education for a Sustainable Future

The Science and Stories Behind Effective College Teaching

Designing for Designers (Routledge Revivals)

The Design of Learning Experience

Magnet and Specialized Schools of the Future

Case Studies