The Learning Powered School

Pioneering 21st Century Education

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Foreword

It is a strange irony that in the face of substantial international evidence that schooling is out of step with the needs of society, there are so few signs of real change. Despite this powerful evidence, education systems around the world are proving deeply resistant to change, change that is needed, as this book makes abundantly clear, if young people are to be prepared adequately to live happily and productively in the twenty-first century. Young people need to be helped to build up the mental, emotional and social resources to enjoy challenge and cope well with uncertainty and complexity. And learning, so the research tells us, is one of human beings' deepest sources of happiness and satisfaction. Yet in the UK, as the authors of The Learning Powered School point out, over 200,000 persistent truants regularly miss a day a week of school. More than a quarter of pupils in Years 9, 10 and 11 actively dislike school. What has gone wrong? And more importantly, how on earth can we put it right? The Learning Powered School provides much needed answers to these urgent questions.

First, the book shows us the science, and clarifies the vision of twenty-first century education that the new sciences of learning are helping to underpin. No engineer would dream of attempting to design a bridge without due regard to the relevant design principles. So, quite rightly, The Learning Powered School starts from first principles. Contrary to the pervasive but erroneous idea that an individual's ability is fixed, we now know, for example, that the brain is like a muscle, in that its intelligence grows with exercise. Selling this idea to learners and their teachers could, in itself, cause a major shift in the prevailing educational axis. How much more learning of all kinds, how much more enthusiasm for engaging with the potential delights of learning, would be generated if all young people understood that learning is learnable; that their horizons are not fixed? The authors quote the work of Professor John Hattie whose comprehensive review of research has shown that helping pupils become more independent, more reflective, and better able to plan and evaluate their own learning, turns out to be a better way of boosting their attainment than drilling them in the subject-matter.

Research also shows that the language we use to talk about education and learning deeply affects how individuals see themselves as learners. Even something as simple as changing 'is' to 'could' or talking in the classroom about 'learning' rather than 'work' can make a difference. The Building Learning Power (BLP) approach which the book describes offers teachers and pupils alike a rich vocabulary for thinking and talking about what learners actually do, and this in itself enables them to expand their capacity and appetite for learning.

Having laid the scientific foundations, The Learning Powered School quickly gets down to the job of outlining a plausible and practical way forward. Mercifully, the solutions offered do not depend on convincing politicians or waiting for high-level policy changes. Nor does the BLP approach depend, to get going, on the
availability of expensive resources. The great strength of BLP is that any teacher who is convinced by the evidence so powerfully presented in this book will be able to get started immediately. Indeed, the book’s main focus is on a wealth of tried and tested strategies that teachers and school leaders can introduce today to begin to transform the learning experience of their pupils.

The experiences of the schools that have been using BLP principles and practices over recent years, clearly documented here, show that this is not a high risk strategy as far as results are concerned. In giving pupils a language with which to think about the process of learning; in giving teachers strategies to encourage their pupils to become more engaged and more effective in their learning, BLP provides a ‘both / and’ solution with which it would be hard for anyone to disagree. Teachers boost the development of students’ confidence, capacity and appetite for learning itself, as well as helping young people to achieve as well as they can in terms of more conventional syllabus content. Students get a better preparation for life and improved examination performance—a seductive package indeed.

I challenge anyone to read this book and not find themselves convinced that the world of education is at a cross-roads. The choice is not whether to teach students Shakespeare or furnish them with skills for life; it is whether to join the growing army of teachers and educators who are developing the ‘both / and’ approach, or not. One road perpetuates the sterile debate between ‘traditionalists’ and ‘progressives’ that is still largely characterised by nineteenth century attitudes and prejudices. The other road is shaped by science. It is a road that is built on the substantial evidence now emerging about what learning is and how it can best be fostered. It is a road out of the cul-de-sac of assessment-driven schools and a performance culture that produces ‘teaching to the test’ and dependent, passive learners—high and low-achievers alike—who frequently lack resilience and real-world intelligence.

The Learning Powered School is a unique book. It speaks in a voice that is at once authoritative, visionary, engaging and accessible. Its message is passionate and urgent, its intellectual underpinnings are beyond reproach, and its multitude of suggestions for action are imaginative, practical and tested by real teachers in real schools. In a globalised world characterised by rapid change and technological innovation, in which young people have few certainties about their futures; in which most people will have several careers; in which we are faced with some of the gravest international challenges ever to face mankind, it is vital that our young people are equipped with the values, the insights and the skills they will need to navigate their way through the jungle of opportunities and threats. The authors of The Learning Powered School are true pioneers; leaders of a growing band of innovators who have shown that an alternative is not only possible, it can be realised now.

Professor Patricia Broadfoot CBE

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- Bushfield School, Milton Keynes
- Eastway Primary School, Wirral
- Mosborough Primary School, Sheffield
- Nayland Primary School, Suffolk
- Princeville Primary School, Bradford
- St Mary’s CE Primary School, Swanley, Kent
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Maryl Chambers has spearheaded practical development of the Building Learning Power programme for TLO Limited, helping to bring Guy Claxton’s ground-breaking ideas to schools and teachers. Maryl is one of the founders of TLO, where she has applied her wide experience of designing learning-focused training to creating the innovative programmes for which the company is renowned. She is editor-in-chief of all, and co-author of many, of TLO’s publications.

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Bill Lucas is Co-Director of the Centre for Real-World Learning and Professor of Learning at the University of Winchester. He has been a school leader, the founding director of Learning through Landscapes, and CEO of the UK’s Campaign for Learning. Bill is a prolific author whose recent titles include: rEvolution (which won the Innovation category in CMI Management Book of the Year) and New Kinds of Smart (with Guy Claxton).
Introduction

Introducing *The Learning Powered School*

In this chapter we:

- introduce Building Learning Power
- explain its core beliefs and research roots
- give an overview of BLP’s reach and practice
- outline the structure of the following chapters
What is Building Learning Power?

Building Learning Power is an approach to helping young people to become better learners, both in school and out. It is about creating a culture in classrooms—and in the school more widely—that systematically cultivates habits and attitudes that enable young people to face difficulty and uncertainty calmly, confidently, and creatively. Students who are more confident of their own learning ability learn faster and learn better. They concentrate more, think harder, and find learning more enjoyable. They do better in their tests and external examinations. And they are easier and more satisfying to teach.

Building Learning Power—BLP for short—is an attempt to refocus schools on preparing youngsters better for an uncertain future. Today’s schools need to be educating not just for exam results but for lifelong learning. To thrive in the twenty-first century, it is not enough to leave school with a clutch of examination certificates. Pupils need to have learnt how to be tenacious and resourceful, imaginative and logical, self-disciplined and self-aware, collaborative and inquisitive.

Five core beliefs for a big ambition

There are five core beliefs that underpin this focus.

The first is that the core purpose of education is to prepare young people for life after school; to get them ready, as Art Costa, an American educator with similar views, says, ‘not just for a life of tests, but for the tests of life’.

We think this means helping them build up the mental, emotional, and social resources to enjoy challenge and cope well with uncertainty and complexity. If you strip away political dogma, the evidence is overwhelming that this aim is not currently being achieved for very many students. Of course, this has to be done in a way that also develops literacy and numeracy, and gets young people the best test results possible. That is the challenge that BLP schools and teachers are willing to take up.

Second, we believe that this is a goal that is valuable for all young people. Not all youngsters are going to do well in exams; that is a statistical certainty. So there has to be another outcome that is useful and relevant to those who are going to flip burgers and clean offices, fix cars and cut hair, as well as those who are going to plead cases in court or prescribe medications. We think this involves helping young people discover the things that they’d really love to be great at, and to strengthen the will and the skill to pursue them. BLP schools aim to build that spirit of resilience and resourcefulness in all their students.

Third, we think this aim is particularly relevant in societies, like ours, that are full of change, complexity, risk, opportunity, and individual responsibility for making your own way in life. In our grandparents’ day, many youngsters knew pretty clearly what their role and station in life was destined to be—miner, housewife, priest, primary school teacher. Not any more. In the swirling currents of today’s world, many youngsters are at sea. And that makes them anxious, angry, confused, and vulnerable. That is the lack that BLP aims to put right.

Fourth, we believe that 99% of all young people are capable of developing this confidence, capability, and passion. We think that our society’s notion of ‘ability’ has been too closely tied to academic achievement, and to the assumption that some youngsters have got a lot of that sort of ability, and some not very much. We think that real-world intelligence is broader than that, and that it is not fixed at birth, but something that people can be helped to build up. The aim of BLP is to generate and broadcast practical ideas about how to expand real-world intelligence more and more effectively.

And fifth, we don’t think that this challenge has been anywhere near met yet. There has been a lot of talk globally about lifelong learning and the ‘wider skills’ or ‘key competencies’ for life. But much of it has been at the level of wishful thinking and vague exhortation, or simplistic ‘hints and tips’ that don’t get close to doing the job that needs to be done. We think what’s needed has to be seen as a gradual, sometimes difficult, but hugely worthwhile process of culture change by schools and habit change by teachers.

The depth and challenge of what is involved, if we are genuinely to deliver on this big ambition, has been widely underestimated. BLP schools have been pioneering ways of taking this ambition really seriously. We think it is time to move from vision statements and soundbites to sustainability and precision.

Achieving the ambition: vital, difficult and do-able

This book shares with you the fruits of these endeavours so far. A good deal has been learned over the last decade about how to do this well—and about how not to do it! We know from what schools tell us that the ambition is achievable. As well as stories of success we have gathered cautionary tales, because the latter can be helpful and instructive. And a great deal more remains to be discovered. BLP is a journey of exploration, not a neat glossy package. It is a set of practical ideas, frameworks, and resources generated by schools and teachers willing to take these aims seriously and try them out.
We have been privileged to work, over those ten-plus years, with some superb teachers and headteachers, schools and local authorities, some of whose journeys you will read about in the pages that follow. They have generated and trialled all kinds of ideas, and have helped us to pull them together and present them in ways that other hard-working teachers will, we hope, find practical and inspiring. But it has to be said that those schools, adventurous and pioneering though they are, will always be the first to admit that they are still achieving only a fraction of what they now believe is possible. The journey deepens and becomes more exciting as you go along.

BLP is definitely not for those who want a quick fix. It demands of schools exactly the same kinds of resilience and resourcefulness that they are aiming to strengthen in their students. They have to be willing to keep going even though some teachers—and indeed some students—may not like it or ‘get it’ to begin with. There may well be rational scepticism, or even reflex cynicism, to be overcome. Is BLP, as someone put it, ‘just another bloody initiative’? There are legitimate worries about whether the exam results might be put at risk, whether parents will appreciate what is going on, or whether the local authority or Ofsted (or similar regulation across the world) might disapprove. Leaders have to know their school communities well, in order to judge best how to challenge and reassure in the right measure: where they can push and take a few risks, and where they will have to be patient and prepare the ground more slowly. All of these issues, and many more, will be aired in the pages that follow.

Taking it up: doing it right
So far, thousands of schools and classrooms around the planet have experimented with BLP. Some of them, like Red Beach School in New Zealand or Park View Community School in County Durham, have really ‘got the bug’ and deeply embedded the principles of BLP in every aspect of school life. In such schools, you can find the spirit and language of BLP in the way the pupils ask questions, face difficulty, and work together. Some have had more of a ‘dabble’, and adopted some techniques that are still rather on the surface. Others have assimilated ideas from BLP into different frameworks—‘personal learning and thinking skills’, ‘social and emotional aspects of learning’ or ‘key competencies’, for example—or into the general ethos of the school, in a way that takes up some of the spirit of BLP but no longer calls it that. All of this we think is fine, and there are stories of all three kinds here.

Whole-school experiences
Sometimes BLP gets taken up by enthusiastic individuals or groups of teachers in places that have not taken it on as a whole-school or college-wide project. This was more likely in the early days. Now we work mostly with schools where there is a collective will—or at least the senior leadership team wants there to be—to adopt the aims and principles of BLP across the whole community. It is these whole-school experiences that we are concentrating on in this book, so one of its main audiences, we hope, will be school leaders who are interested to know what the BLP journey might look like, what are the benefits and outcomes, and what are some of the pot-holes in the road that they could usefully avoid.

Classroom culture
BLP is about culture change in schools. By a ‘culture’ we mean all the little habits and practices that implicitly convey ‘what we believe and value round here’. The fact that Art occupies a fraction of the time devoted to Maths, or the emphasis on ‘target grades’ in school reports, tell you more, we think, about the culture of a school than does its Vision Statement. The medium of a school is its most powerful message. And the most important messages are conveyed to students in classrooms. Classrooms are the places where, hour after hour, students experience the values and practices that are embodied in the school, rather than just the ones that are espoused. We have learned that you can’t make young people into powerful, proactive, independent learners by pinning up a few posters, or by delivering a stand-alone course on ‘learning to learn’ in Year 7. Unless you can actually see and hear the commitment to the development of students’ learning capacities in the middle of a routine Year 9 lesson on simultaneous equations, or a Year 4 project on the Vikings, we don’t think that the teachers have really ‘got BLP’ yet.

So the heart of BLP concerns the details of the micro-climate that teachers create in their classrooms. What they do and say, what they notice and commend and what they don’t, what kind of role model of a learner they offer: all these are of the essence. And especially what matters is how they design and present activities so that, over the course of a term or a year, their students are cumulatively getting a really good all-round mental work-out. All the learning bits of their brains are being stretched and strengthened, one by one and all together. As you will see, BLP teachers tend to get quite specific about what the elements that go to make up a ‘powerful learner’ actually are, and how they can best be exercised. We want this book to be of as much interest to classroom teachers as to school leaders.
Involving everyone

But BLP really takes root in a school when the whole community supports the vision and finds ways of helping to make it real. We have found that teaching assistants of all kinds can play a vital role. So do the administrative staff in the school. People who type letters or look after the buildings can be powerful role models of learning. Support from governors really helps to reassure heads and their staff that these ideas, though some of them might be a little strange at first, are worth trying out. Parents obviously play a vital role in supporting the school, and also in directly encouraging their children to persist in the face of difficulty, and to realise for themselves when they need help and when they don't. We have a growing body of knowledge about how schools can work with parents to forge stronger partnerships. And where schools feel they also have the sympathetic support of local authorities, they may feel free to be more adventurous, and so progress a bit quicker on their journey. Thus we hope this book will also be read by support staff, governors, parents, and local authority officers.

Convincing others

Finally, we would like national educational bodies to take more note of the things we are finding out. In England, that would mean Ofsted, the Department for Education, civil servants and government ministers, and the headteacher and teacher unions. Many of these bodies retain an overriding concern with 'standards', traditionally defined. They still measure the success of education largely in terms of literacy scores and examination grades—though many of them also bemoan the fact that there is too much 'spoon-feeding', or worry about the many bright students who struggle when they get to university because they have never learned how to manage their own learning.

If these bodies could be convinced that there were smart practical things that schools could do that both increased the test scores and helped students develop positive attitudes towards learning more widely, how could they possibly not approve? Though we don't yet have a large-scale evaluation of BLP, we have sufficient evidence from schools to persuade us that this 'both/and' philosophy is an achievable reality. The Learning Powered School is an interim survey of that evidence, and we hope that these national organisations will indeed find enough here to make them take note.

The roots of BLP

BLP has three major root systems that nurture and stabilise it.

A vision of education

The first, which we have already identified, is a well-articulated vision of twenty-first century education. This vision (which we will explore in more detail in Chapter 1) grows out of the real demands, risks, and opportunities of the twenty-first century. It is appealing and accessible to all young people, not just the academically 'able' or inclined. It values, in reality as well as in rhetoric, more kinds of outcomes than literacy, numeracy, and examination grades.

Practitioner research

Secondly, BLP is grounded in the reality of schools and classrooms: in what busy teachers find it possible, practical, and interesting to try out. We strongly encourage teachers to see themselves as research partners with us, and where possible to record and write up their experiments as small action research projects, recording answers to the questions, 'What was I trying to achieve?', 'What was the status quo I was trying to improve upon?', 'What did I actually do?', 'What effects did I observe?', and 'What did I learn that I can take forward and try to develop even further?'. We have worked with a range of local authorities, including Cardiff, Oxfordshire and Milton Keynes, to enable groups of teachers to explore and record their BLP experiments in this way, as well as with a large number of individual schools and teachers. These teacher-researcher projects produce what David Hargreaves has called 'research with a small r'. This kind of research often has more effect on changing the practice of other teachers than more formal evaluative kinds of research, published in peer-reviewed education journals, which we might call 'research with a middle-sized r'. Hargreaves argues that both are needed, and we agree. However, it is only now that BLP practice is becoming mature, wide-spread and clearly-specified enough to submit to more comprehensive evaluation, and we are only just beginning this phase of the journey.

Fundamental scientific research into the nature of learning

The third root system that underpins BLP is the more fundamental scientific Research with a capital R. It is only in the last ten years or so that a number of disciplines have come together under the banner of 'the learning sciences'. Geneticists such as Robert Plomin are now helping us move beyond the sterile 'nature versus nurture' debate and find out how heredity and experience work together to develop ability. Work in psychology by people like Carol Dweck and David Perkins is also focusing on the learnability of
intelligence, and showing how cognitive abilities, personality, and belief systems all weave together to shape the development of a person’s intelligence. Developmental psychologists such as Howard Gardner have opened up our understanding of different types of intelligence, showing that academic ability is only one kind of ‘smart’, and, in real life, not always the most relevant kind. Neuroscientists like Chris Frith and Jean Decety have been using neuro-imaging techniques to investigate (among many other things) the way brains pick up mental and emotional habits from each other, and making us think about the important role teachers have in modelling learning to their students. Sociocultural researchers like Jean Lave and Barbara Rogoff have revealed how people work together to share and enhance each others’ learning capability. Even academic philosophers like Daniel Dennett and Andy Clark are giving us food for thought, in Clark’s case by showing how important tools are for learning, and how people can learn to amplify their own learning ability by hooking up with all kinds of smart devices—and by no means only digital ones. All of this and much more is shaping a new image of the malleability of young minds, and BLP tries to make as much use of these ideas as possible.

Taken together, we think these three root systems provide BLP with a strong and stable foundation. BLP has a well-articulated and defensible vision, a philosophy of education for the twenty-first century. It takes a clear stand on what schools ought to be doing. And it has a strong basis in different kinds of scientific research with a small and a large R. This book focuses on the practitioner evidence base and the practical suggestions for school improvement to which it has led. If you would like to read more about the roots of BLP, the vision and philosophy have been laid out in Guy Claxton’s What’s the Point of School? and the scientific foundations are explored in Guy Claxton’s Wise Up and Bill Lucas and Guy Claxton’s New Kinds of Smart.

BLP so far

Types of schools

In the eight years or so since Building Learning Power was published, with the enthusiastic participation of an ever-growing number of teachers, we have built up an array of resources to help schools implement BLP ideas, as well as a worldwide network of schools who are sharing ideas and helping to produce further resources. To date, we know of schools using BLP principles and frameworks in New Zealand, Australia, Thailand, Singapore, Malaysia, Philippines, South Africa, Dubai, Abu Dhabi, Albania, Sweden, Argentina, Chile, Bermuda, and the USA. In the UK we are in touch with schools using BLP in all four of the constituent countries from Belfast to Suffolk, Selkirk to Cardiff, and the Isle of Man to the Isles of Scilly. This book contains many of their stories.

Encouragingly, schools are finding BLP practical and useful with all ages, subjects and ‘abilities’. They include special schools, infant, primary and comprehensive schools, grammar schools, academies and independent schools, as well as schools with ‘serious weaknesses’ or in ‘special measures’. You could see BLP at work in Dhoomon Primary School, a tiny school on the Isle of Man; George Pindar Community Sports College in a seriously deprived area of Scarborough; Dr Challoner’s Grammar School, a high-achieving grammar school in Amersham; Simpson School in Milton Keynes, where a good many of the children still live in construction workers’ prefabs that were condemned twenty years ago; and The Scots College, an independent boys’ school in Sydney, Australia.

We have worked with departments and teachers of maths, science, English, history, PE, design technology, art, drama, music, ICT, modern foreign languages, and religious studies. There is growing interest from further education and sixth form colleges, who are discovering that it is never too late to start building students’ learning power. We have helped a number of local authorities to spread BLP across their schools, including Milton Keynes, Solihull, and the London Boroughs of Barnet and Ealing. We are just helping to develop the first school-based initial teacher training course that uses BLP principles. And we are currently also working with the armed forces, the Football Association and with centres of outdoor education to see how they, in their more practical settings, can help young people develop the habits of mind of disciplined exploration more effectively.

The BLP network

BLP brings together schools and teachers who like the vision, want to work it as deeply as they can into their schools and classrooms, and are keen to help develop the precision and practicality of it in a wide variety of different contexts. There is no formal membership; schools participate as much or as little as they choose. At the hub of this network there is a small training and publishing company, TLO Limited, which coordinates the work of the network, and collects and distils all the various experiences into useful resources to feed back to existing and new members of the network.

These resources include a number of publications; DVDs of ideas for creating BLP classrooms; local networks in various parts of the world coordinated by designated ‘hub schools’; a team of teachers who have considerable experience with the implementation of BLP and can act as advisers and consultants to schools; and perhaps most importantly a variety of courses, workshops and seminars which offer stimulus and support to schools at various stages of their journey.
BLP traits

We find that people attracted to BLP tend to share a number of traits. They are:

- Reflective and honest about their own practice
- Enthusiastic but discerning consumers of new ideas
- Open-minded and willing to try something out and ‘give it a go’ if it makes sense
- Patient: they know they are on for the long haul and aren’t interested in a quick fix or something merely to get a badge for, or brag about
- Resilient: they don’t give up quickly in the face of setbacks, but ‘try it another way’
- Inclined to be open with their students about what they are trying to do, and to involve them in reflecting on and customising the way teaching and learning happens in their classrooms
- Collaborative and generous with each other about their thoughts and ideas

Researching this book

For ten years we have been going into schools, sitting in lessons, talking to teachers, and watching students’ reactions. But the preparation of this book has given us an opportunity to undertake more systematic evaluation of BLP in action. We asked twenty schools we had worked with—roughly half primary and half secondary—if they would allow a researcher to come in for a day and take stock of how BLP had influenced the practices and outcomes of their school. In almost every case, they had been working with the ideas for two years or more and the schools we selected span different parts of the country, rural, suburban and inner-city environments, different demographics and different levels of attainment.

On all of our research visits to the schools, we gathered as much documentary evidence as possible about the role of BLP in the school, and its effects on the pupils’ behaviour and performance. Obviously, we were keen to know if there had been any improvements to students’ levels of achievement, attendance, and engagement since they started using BLP. If there were, we asked to what extent the school attributed these changes to BLP, and tried to evaluate the evidence they were using to justify their answers. We interviewed those who had been most involved in the development of BLP about their experience, and especially about lessons they had learned along the way about how—and how not—to implement BLP well. We asked to observe a lesson or two to observe the ways in which BLP was being used. And we asked to talk to some students about how they saw BLP, and whether they felt it was helping them to become more confident and resourceful learners, both in school and, more importantly, outside. We also tried to talk to a few parents and governors to get their impressions.

As you will see, BLP has evolved into a longitudinal and multi-layered culture change process. We do not believe that anything more short-term, or more simplistic, can really change students’ mental habits and attitudes towards learning. It is also very easy for quicker ‘initiatives’ to flare up and then fizzle out after the initial enthusiasm wears off, or when key personnel move on. We want BLP principles to get so deeply into the lifeblood of a school that it will be resistant to such factors.

The problem is that such long-term, multi-layered change is hard to evaluate. Many other factors are also changing in the life of a school over the same period. And if your ‘intervention’ involves changing a whole range of things at once, you cannot tell which of them, or what combination, is the cause of any effects you observe. Nevertheless, we think that, taken together, the information and the narratives which we present here add up to an irresistibly powerful endorsement of BLP and its effects on young people. BLP is not snake oil; it is not a remedy for all educational ills. Some young people are hard to reach whatever you do, and so are some teachers. Schools are complicated places, and histories and personalities always loom large. But we are convinced that we are well on the way towards discovering how to make the vision into a reality. We hope you will be too.

How the book is organised

BLP has many different layers. And like a piece of plywood, the layers need to be strongly glued together to create maximum strength. So with this metaphor in mind, here is the structure of the rest of the book. Each chapter explores one of these layers.

The first three layers represent the background conditions for developing a learning-powered school.

1. Vision: deepening the sense of why teaching for learning power is so timely and important—economically, socially, and in terms of individual well-being. Without this underpinning of clear values, commitment in the school tends to be weaker and more vulnerable in the face of competing demands.

2. Science: understanding what learning power involves, and knowing the evidence that supports the idea that each element of learning power is important, and capable of being cultivated and developed. Without this foundation layer, other more familiar ways of thinking about young people and their potential can creep back and further undermine commitment.

3. Beliefs and assumptions: facing and challenging common assumptions about school, learning, and young minds that can be quite engrained and
pervasive, although contrary to current scientific understanding. Without the vigilance of this layer, it is easy to think that BLP is (a) pie in the sky, (b) jeopardising to existing levels of achievement, or (c) something we are doing perfectly well already.

The next four layers describe the activities at the day-to-day heart of a learning-powered school, and the steps that teachers can take to make these a natural part of their practice.

4. Talking—and walking—the talk: encouraging teachers to use a language to talk to and about young people which supports their development as powerful learners; and to exemplify the traits of an effective learner in their dealings with students. Without this unifying layer, new intentions can remain rhetorical or cosmetic, and not permeate the culture.

5. Teaching and the classroom: designing learning activities that deliberately stretch and exercise the full range of learning-oriented habits of mind; providing increasing opportunities for students to design and direct their own learning; and using the physical environment to reinforce positive messages about exploration and experimentation. Without changes to pedagogy, teaching—however good at getting the results—may routinely stimulate only a narrow subset of students’ mental faculties. Without changes to student ownership they are deprived of opportunities to develop their own learning styles and interests. Without changes to the physical environment, it can easily give out retrograde messages about teaching and learning.

6. Curriculum design: organising the content of school—the syllabus, timetable, tests, and so on—so that a varied repertoire of stimulating learning is continuously available and attractive. (This does not mean that all learning has to be ‘fun’, of course.) Without structural change at this layer, students’ engagement and commitment are likely to be weaker, and the development of their learning power correspondingly slower.

7. Assessment and progression: designing explicit ways of tracking students’ growth as confident and independent learners. Without some creative thought, commitment, and honesty at this layer, traditional forms of assessment and certification will continue to determine what counts as ‘high stakes’ learning and ‘bottom line’ success in school.

The final three layers focus on some of the most important activities at whole-school level that help to support the introduction and embedding of the BLP approach.

8. Leadership: understanding the culture of the school, with its unique dynamic pattern of strengths, vulnerabilities, and sticking-points; understanding what is being asked of teachers, what difficulties and demands it will involve; sequencing and prioritising aspects of culture change astutely, what is and what is not negotiable; recruiting the governing body to understand and support the direction of growth of the school; keeping an eye on the vital signs of how the embedding of BLP is progressing and the impact this is having on staff and students. Without wisdom and support at this layer, headteachers may be unable to resist the pressure to slide back into prioritising more traditional and familiar goals.

9. Professional development in a community of inquiry: encouraging teachers’ openness about and enthusiasm for their own learning, and strengthening a whole-school ethos of non-defensive, supportive, and collaborative inquiry. Without the development of this layer of professional intelligence, teachers are not seen to ‘practise what they preach’ and the process of culture change is slowed.

10. Engaging parents: involving parents and the local community in the vision and practice of the learning-powered school, and harnessing parents’ ability to deepen their child’s attitude to learning is a critically important layer. Without such involvement, the transfer of learning dispositions between the training-ground of school and the wider world of learning is restricted.

The last two chapters in the book are slightly different. They do not relate directly to the process of school development, but provide some background information and conclusions about the overall approach.

11. The impact of BLP: does it work? What effect does the introduction of BLP have on students: their achievement, their development as learners, and their attitudes towards learning? We present evidence from a variety of sources.

12. Taking stock and moving on: the final chapter reviews the main messages that have emerged from the individual chapters, and presents some reflections on learning so far and some thoughts about possible futures.
Part 1
Background Conditions

In Part 1 we look at the layers of Learning Power culture change that are to do with beliefs and values. A school that wants to go down the BLP route needs to keep reminding itself why this direction is so important; otherwise, when routine demands crowd in, it is all too easy to lose focus and commitment. It also needs to keep developing the collective understanding of the science behind BLP—otherwise it is all too easy to be blown off course by the re-emergence of more familiar habits of thinking and planning.

It is also important that a school develops its own curiosity about the approach and the research that underlies it, and to feed that curiosity with reading and discussion. And it helps to prevent the developing BLP culture being derailed by scepticism, or even knee-jerk objections, if those reactions can be anticipated and countered in a well-informed and rational way. If BLP is to take root, it is highly desirable, we have found, to allow plenty of time for such questions and objections to be aired.

BLP asks teachers to change their habits, and they quite rightly need to be convinced that the change is going to be worth the effort—and that it will actually make a difference for the better. Taken together, these form the background conditions—the preparation of the soil, into which the seeds of BLP are going to be sown—which will help to maximise the likelihood of germination.
Chapter 1

Vision: Why schools have to change

In this chapter we explore the reasons for seeking to change education, focusing on:

- creating economic prosperity
- wellbeing
- social trends
- increasing digitalisation
- the competitive educational environment
- the pressure of being successful
- disaffection among young people
Chapter 1 | Vision: Why schools have to change

Ross Hall, the Director of International at Edexcel who commissioned the report, was surprised by the common dissatisfaction being expressed in Mumbai, Sao Paulo, Beijing and Dubai, and the repeated calls for a curriculum which would be effective at cultivating a core set of ‘generic skills and attributes’—pre-eminently, ‘the ability to learn’. Amongst the qualities of mind that kept being mentioned as both widely desirable and widely lacking were problem-solving, creativity, initiative, responsibility, teamwork, empathy and communication. ‘One of the most striking findings across the whole of the research’, wrote Hall, ‘was the commonality of these transferable qualities.’

Go back thirty years and it is depressing to see how similar the criticisms being expressed were then. The Royal Society for the Encouragement of Arts, Manufactures and Commerce, the RSA, published a manifesto in 1980 called ‘Education for Capability’ signed by 140 leading figures of the day in the world of work. It said:

‘The country would benefit significantly in economic terms... if educators spent more time preparing people for life outside the education system. A well-balanced education should, of course, embrace analysis and the acquisition of knowledge. But it must also include the exercise of creative skills, the competence to undertake and complete tasks, and the ability to cope with everyday life; and also doing all these things in cooperation with others. In schools, too often, young people acquire knowledge of particular subjects, but are not equipped to use knowledge in ways which are relevant to the world outside the education system.’

In the words of Anthony Seldon, Master of Wellington College:

‘The new world does not need container loads of young men and women whose knowledge is narrowly academic and subject-specific which they can regurgitate in splendid isolation in exams. It needs people who have genuine understanding not just in one but in several academic domains, and who comprehend how these different fields relate to each other. It needs people who can work collaboratively, with advanced interpersonal skills, as opposed to those who have been tested merely on their ability to write exam answers on their own. It needs problem solvers rather than those who just hold a large body of data in their memories. It needs employees who have mature thinking skills, able to understand the complexity and the interaction of intricate systems, people who are able to think way beyond standard and formulaic patterns.’

Creating economic prosperity

Education is often justified, by governments and others, as an investment in national competitiveness and prosperity. ‘We need, so the argument goes, a national workforce that is highly-skilled, creative, and adaptable, so as to be able to compete in global markets. But how well are schools actually doing, in terms of producing large numbers of youngsters who possess these characteristics?’

In 2009 Guy and Bill undertook a major review of the kinds of wider skills that economies around the world are trying to cultivate, precisely in order to make their citizens more innovative and, therefore, employable. ‘We found that, wherever you go, from Singapore to Venezuela, New Zealand to Sweden, Brisbane to Birmingham, employers are crying out for people who can think for themselves, show initiative and collaborate effectively.’

Also in 2009, Edexcel, the giant multinational educational provider, published the results of an international survey entitled Effective Education and Employment: A global perspective. The research canvassed the views of a wide range of stakeholders, over 2,000 of them, in over 25 countries. Two findings screamed out of this report. First, from the employers’ perspective there was an astonishing consensus about the desirable outcomes of education. Whether in Brazil, China, South Africa or the UK, employers are crying out for ‘workers who have the right attitude, a willingness to learn, and an understanding of how to conduct themselves in the workplace.’ And second, there was an equally clear international consensus that schools and colleges are not delivering the goods. The report concludes that:

‘There is a significant disconnection between education systems and the needs of twenty-first century employers. People may or may not have the right clutch of certificates—but far too few of them have the attitudes that employers know are the more important foundations of that elusive ‘world-class work-force’.”
Social wellbeing and cohesion

Tomorrow’s world will be, if anything, even more complex and fast-changing than today’s. The UK Government’s major Foresight project on Mental Capital and Wellbeing gathered a wide range of expert advice on foreseeable social and technological trends, and the personal and material resources that will be needed to meet the challenges, and capitalise on the opportunities, which those trends are likely to bring.4

These trends include:

- **Ageing**: people are living longer; the elderly will become a larger and more important group in society; state pension provision may well become less secure. So the disposition in the young towards long-term thinking and planning, coupled with both empathy and flexibility as parents begin to require more care, will be essential.

- **Health**: government scientists are beginning to get ‘tougher’ on the issue of ‘lifestyle disorders’ and people’s responsibility for their own health, as obesity, alcohol consumption and sedentary lifestyles cause expensive conditions like heart disease and diabetes to rocket. So dispositions towards self-discipline and personal responsibility will become increasingly important.

- **Economy**: the rise of highly skilled workforces in China, India, Brazil and elsewhere mean that much ‘brain-work’ can be digitally outsourced, while the practical skills of making and fixing things cannot. A reversal of esteem for the trades and crafts that cannot be ‘done down a wire’ may well be on the way, with a corresponding reappraisal of practical problem-solving and hands-on intelligence.

- **Social change**: continuing shifts in social conditions and expectations will surely require flexible mindsets across the entire lifespan, and a positive attitude towards lifelong learning, whether self-chosen and welcome or imposed and unwelcome.

- **Public services**: the trend in recent years has been towards a model of public services based on greater levels of personal choice, active citizenship, personal responsibility, and ‘co-production’. This is set to continue. To work most effectively, these models of service/client relationship require the greatest number of the public to be equipped with the mental capital and disposition to participate. This calls for a policy mindset that aims to foster mental capital and wellbeing across the whole population.

- **Environmental issues**: increasing concern about climate change, and initiatives like ‘10–10’, will require people to change habits throughout their lives. So—and here we mix our metaphors a bit—we have to sow the seeds, through education, of the willingness and ability of leopards to change their spots and old dogs to learn new tricks! The Foresight report concludes that human wellbeing in a complex time will become increasingly dependent on the dispositions to be curious, inquisitive, experimental, reflective, and sociable—in short, to be lifelong and life-wide learners.

**The digital revolution**

Schools are no longer the prime sources of knowledge, as they were in the nineteenth century and much of the twentieth. The digital revolution has opened up many more ways for young people to learn. Many children who seem dull and disengaged in school are bright as a button on their home computer. With good-enough literacy and the will to learn, most of us can now teach ourselves what we need to learn from the internet.

Or if we can’t, the internet will hook us up with a teacher of our own choosing who, like as not, will be happy to swap their time and expertise for something we can do that they would like to. Websites such as www.schoolofeverything.com will help you arrange such learning exchanges for yourself. Within minutes one of us found a singing teacher who would have been delighted to exchange some singing lessons for some help with their pond maintenance, for example. Most of the ‘students’ and ‘teachers’ in the School of Everything are children and young people.

Sugata Mitra’s famous ‘hole-in-the-wall computer’ experiments in India dramatically demonstrate children’s ability to learn in an entirely self-organised way. Mitra set a computer and a touch-pad in a wall in a slum in New Delhi and watched what happened. Within hours, children as young as six years old had taught themselves how to access the internet, and within weeks, these children who had no previous knowledge of English had taught themselves enough English words to communicate both with the computer and with each other. Within a month they were happily emailing and surfing away. Typically, says Mitra, you will find one kid on the computer, three or four close advisers watching and advising her, and a dozen or more other onlookers who are also watching intently and chipping in. If you test them, the entire group show substantial learning from each session. Take away the school, the teachers, the books, and a dozen or more other onlookers who are also watching intently and chipping in. If you test them, the entire group show substantial learning from each session. Take away the school, the teachers, the books, and the exams, and children, even from very impoverished backgrounds, will organize and teach themselves in highly efficient and successful ways.4

The lesson seems to be: schools, watch out. If we do not find things to teach children in school that cannot be learned from a machine, we should not be surprised if they come to treat their schooling as a series of irritating interruptions to their education. A cautionary tale from nearly a century ago would do well to ring in our ears as we plan our lessons:
we value

Measuring what

exam results

Judged by

how we care for our bodies?
How shall we care for our children?
How shall we live and work together?
How shall we play?
For what ends shall we live?
And the teacher pondered these words,
And sorrow was in his heart,
For his own learning touched not these things.7

Another way of winning at school

It is very hard to break the hypnotic spell of 'standards', as defined by examination success. Despite an increasing barrage of fine words and good intentions, it is the examination results by which schools' and students' performance are ubiquitously judged—by politicians, and by the media. Politicians like to look effective, so they have to show they are having an impact on 'hard data'—and examination grades are conveniently countable and statistically manipulable. Hence the ritual annual fanfare about 'best ever results' (1% more A grades; hooray!), and the equally predictable counterpoint of 'dumbed down tests'.

It is much harder to find ways of showing whether 16-year-olds are more inquisitive, determined, imaginative, and convivial than they were a year ago, so politicians tend not to try. But unless such indicators are developed, GCSE and A-level results will continue to be the tail that wags the dog of education. As someone once said, if we do not find ways of measuring what we value, we will end up just valuing what we can measure. And that distorts the process of schooling, and inhibits teachers from pursuing other aims that they know to be more important.

It is also obvious that, once a single indicator is selected to be the measure of success, people will find ways of manipulating that indicator to their advantage in ways contrary to the original spirit of what 'success' was supposed to mean. In economics this is called 'Goodhart's Law': 'once an indicator becomes a target—especially if funding depends up on it—it stops being a good indicator.' Only someone with a complete lack of insight into human nature could be surprised by the fact that, if 'number of operations performed' becomes a target, hospitals will start doing more of the quick and easy operations (like cataracts), and fewer of the harder and longer ones (like heart surgery). Or headteachers will discourage low-achieving pupils from attempting difficult subjects, connive at their absence on the days of the critical test, and enter more pupils for courses with assessments that are known to be easier.5

Examinations are competitive. Not everyone can be a winner. Your son's four A's at A-level only have value (for university entrance, say), because someone else's daughter didn't get them. This is an inconvenient truth that politicians tend constantly to fudge.10 Less than half of all 16-year-olds will achieve the UK government's own benchmark of a 'good enough' education—five GCSEs, two of which must be English and Maths, at C-grade or better. Many fewer will achieve the 'English Baccalaureate'. So what do the others come away with, if not a sense of relative failure?

From an assessment and certification point of view, there has to be another 'way of winning' at school that is valued by young people themselves. The word they often use is 'confidence', which is the opposite of 'insecurity', 'anxiety', and 'self-doubt'. In other words, young people themselves, so the surveys show, want those wider skills just as much as their potential employers do.

Disaffection

Very many young people don't find value in what they are doing at school, and either muck about or bunk off. Over 67,000 play truant every day, and the rate is rising—despite nearly 10,000 parents of truants in 2008–9 being prosecuted in an attempt to 'crack down' on absenteeism. There are over 200,000 persistent truants, those who regularly miss a day a week of school or more. According to a 2009 piece of research for the Department of Children, Schools and Families, more than a quarter in Years 9, 10 and 11 actively dislike school. They are at risk of dropping out or, if they stay, of disrupting the education of others. Only a third of 14- and 15-year-olds 'were highly engaged with school and aspired to continue with full-time education to degree level'.11

Why are so many young people disengaged? Some people blame the parents, or bullying, or 'trendy teaching methods'—as if good old-fashioned chalk-and-talk and 'firm discipline' were as unquestionably valid in twenty-first century London or Belfast comprehensives as they were in nineteenth century grammar and public schools. Some blame low levels of literacy, and urge that young people who are not good at reading and writing, and have learned to dislike it, should be made to do more and more of it—as if it were a mere technical difficulty totally divorced from youngsters' more general attitudes and feelings towards school.

Professor William Richardson of the University of Exeter has suggested that a major difference between those who stay engaged with school beyond the age of 14, and those who don't, is not that one group is 'brighter' or 'better behaved' than the other. It may be, in large measure, that those who stay engaged are simply more willing to remain in the role of 'pupil'—are
better able to sit still and listen, or are just more interested in the subject-matter and procedures of school—while others are more impatient to take on the roles and responsibilities of adulthood. The route that seems to offer them this faster-track entry into adulthood is the vocational one, so their interests may develop in a way that allows them this escape. Richardson says:

‘It was always the case that large numbers of young people wanted to leave school at the earliest opportunity. They hated the uniform. They felt infantilised. They wanted to be adults... They were aware of the world “out there” and wanted to join it, and school felt like it was holding them back. So it is not just a matter of their interests or mentality; the vocational route is the one that seems to respond to that urgency. The majority of this group who want to leave school early have huge capacities and potential, but... they [tend to] get shunted into a low-status, low-prospects route and then feel trapped and let down. Their potential could have come alive had the pedagogical environment been much richer. You see people thrive quickly when the setting changes.’

BLP aims directly to develop that richer pedagogical environment. In BLP, the traditional concern with subject-matter is balanced fairly and squarely with an equal emphasis on the development of a broad repertoire of useful, transferable qualities of mind. It is these mindsets that all young people want and need. Some of them can stretch and strengthen them by studying physics or Spanish; others can get equivalent mental exercise in the context of learning to colour hair, fix engines or care for people with learning difficulties. It is, to use a fancy phrase, the epistemic exercise of the world “out there” and wanted to join it, and school felt like it was holding them back. So it is not just a matter of their interests or mentality; the vocational route is the one that seems to respond to that urgency. The majority of this group who want to leave school early have huge capacities and potential, but... they [tend to] get shunted into a low-status, low-prospects route and then feel trapped and let down. Their potential could have come alive had the pedagogical environment been much richer. You see people thrive quickly when the setting changes.’

B Ricky Gervais

The pressure of being successful

In terms of ‘life skills’, key competencies, or ‘essential qualities’—call them what you will—schools are failing high-achieving, as well as low-achieving, students. There is good evidence that high-achievers—especially, but not exclusively, girls—often develop an anxious attitude towards their own performance that makes them go to pieces in the face of unexpected difficulty, and avoid new kinds of challenges in case they ‘look stupid’. They know how to get good marks in school’s terms, but lack resilience and adventurousness in a wider sense. They know how to succeed, but they have not learned how to fail, or how to struggle.14

This failure to develop resilience, curiosity and independence at school stores up trouble for those bright young people later on. In 2009–10, around 1,500 students sought out the Cambridge University Student Counselling Service. Between 15 and 20% of Cambridge undergraduates will seek counselling at some point during their studies. Mark Phippen, head of the service, says the pressures on them are severe and getting worse. More and more intense spoon-feeding at school renders them less and less capable of coping with these pressures when they arrive. Many of them fear that they are impostors—significantly less capable than they have been helped to appear.

It is the same at Oxford. Alan Percy, clinical director of the Oxford Counselling Service, has charted yearly increases in referrals for debilitating stress and anxiety. If these high-achieving students cannot achieve quick success, they flounder. As their school courses have become more modularised and packaged, Percy says, so students have been deprived of the opportunity to learn how to grapple over time with genuinely difficult things. Percy notes a paradoxical trend which he calls ‘pseudo-maturity’: young men and women who seem much more confident and worldly-wise than their more gauche equivalents of 20 or 30 years ago—but who, below the surface, have fewer resources with which to meet difficulty.15

Being happy

Unless they are protected from change by living in highly remote places, or within closed societies that deliberately insulate themselves from the complex currents of globalisation, young people find growing up in the twenty-first century hard. From an increasingly young age, they are exposed to multiple pressures and uncertainties concerning such deep issues as livelihood, sustainability, sexuality, loyalty and identity. They have to select and craft for themselves answers to questions such as ‘What matters?’, ‘What shall I become?’, ‘What am I ready for?’, ‘Where is my “place”, both geographically and socially?’ and ‘Who is “Us” and who is “Them”?’

In his seminal book In Over Our Heads: The Mental Demands of Modern Life, Robert Kegan charts the ways in which young people are now growing up in ‘stick-shift’ rather than ‘automatic’ cultures. In an ‘automatic’ culture, as in an automatic car, much of the decision-making is built into the workings of the culture itself. You have neither the responsibility nor the opportunity to think about these deep questions: your path is largely mapped out by the
way the culture itself functions. It is pretty clear when to get married and what it means to be a ‘husband’ or ‘wife’, for example.16

But in a stick-shift (or what in the UK we would call a ‘manual’) culture, much more is up for grabs. You, the driver, have to decide when to change gear. Different value systems collide daily on our television screens, as we are exposed to an endless fashion parade of learned academics, ardent environmentalists, narcissistic supermodels, gentle gardeners, insouciant fat cats, and misogynistic rappers. If you are not to be swept away on this torrent of imagery, they have to learn how to think for themselves. And this is both exciting and liberating, and stressful and demanding. Whether you flourish or flounder depends on the resources they have at their disposal. To swim rather than sink demands a level of mental and emotional development (as well as a good deal of stable and sensible external support) that those who live in more predictable times simply do not need.

The evidence is that a great many young people around the world are indeed struggling to cope. An authoritative comparison of teenagers’ mental health between 1974, 1986 and 1999 documented a ‘sharp decline’ in a range of indicators of well-being. More recent surveys show that these trends are not just continuing but becoming worse. It is not just a few kids at the margins who are skewing the stats, nor is it merely a matter of increased frequency of reporting. Across a wide range of countries and backgrounds, youngsters are struggling to cope.

One of the most reliable sources of happiness turns out to be learning. People report feeling happy with themselves when, like Ricky Gervais quoted earlier, they are engaged in struggling with something difficult but worthwhile; when they feel in charge, and are not being chivvied or criticised by others; and when they are able to become so engrossed in what they are doing that all self-consciousness and self-awareness drops away.17

So when parents say—as they often do—‘I just want my child to be happy’, here is one of the best pieces of advice. Help them, and get their schools to help them, to discover what it is that they would love to be great at. Help them discover the ‘joy of the struggle’: the happiness that comes from being rapt in the process, and the quiet pride that comes from making progress on something that matters. And help them to understand and develop the craft of worthwhile learning—how to make best use of imagination, reasoning, concentration, collaboration, and so on. That is what BLP aims to do.