Contents

For	eword by Doug Lemov	i
Ack	nowledgements	v
Inti	roduction	1
1	Challenge	. 13
2	Explanation	51
3	Modelling	
4	Practice	123
5	Feedback	165
6	Questioning	201
7	Embedding the Ethos	239
App	pendix 1. Index of Strategies	
App	pendix 2. Planning and Reflection Tool	269
Bib	liography	273
	ex	
	out the Authors	

Introduction

One Easter, Shaun and his wife, Lianne, were clearing out their loft when they happened upon Lianne's dog-eared school books hidden away in a dark corner. They were from her fourth year (Year 10) chemistry lessons when she was taught by Mr Clarke, a teacher she remembers vividly to this day. They started to flick through. Her books were full of detailed, well-presented notes. Even thirty years later, Mr Clarke's teaching approach shone brightly from those dusty pages.



Chemistry was hugely challenging in Mr Clarke's lessons. In Year 2, Lianne was learning about valency; in Year 4, empirical formulae. As one of his students, it was your duty to raise your standards to meet his demands – he would never come down to meet you. Woe betide anybody whose efforts did not make the grade; Mr Clarke might publish your name on his infamous 'dirty dozen list'! You were always expected to respond to Mr Clarke's marking. He would write 'corrections' and you would be expected to repeat your incorrect answers until they were right. Mr Clarke did not worry about whether the work was intrinsically interesting. He cared that you learnt what you needed to know. Every

student in Lianne's chemistry class achieved an O level grade C or above. And it was a mixed-ability group too.

Did Mr Clarke's lessons engage and motivate his students? You bet they did. He regularly won the school's 'teacher of the year' award and is still a local hero in Porthcawl, South Wales, despite having retired some years ago. Lianne is now a successful science teacher.

As a profession we have become confused. After many years of educational research, nobody can put a definitive finger on what successful classroom practice really looks like. Yet teachers across centuries and millennia seemed to have managed perfectly well. Mr Clarke certainly did. Of course, successful teaching is more than a case of simply mimicking those we admire. We have to find something that works for us individually – in our classrooms, in our schools. Might it be, however, that in recent years the profession has so overcomplicated definitions of 'good practice' that it has blinded itself from some simple truths?

Ofsted, who in the past have favoured and prescribed a preferred style of teaching, last year stepped back from grading individual lessons – instead letting schools define how successful teaching should look for themselves. In classrooms up and down Britain, teachers now have more freedom than they have had for a decade to develop and hone strategies that suit their preferred teaching style and the needs of their students. This is a welcome but daunting change. It also poses a question. If we are to make every lesson count, what simple and manageable actions have the greatest impact on learning?

We should categorically state from the outset that we do not believe in silver bullets. This book does not pretend to gift you with solid answers to every dilemma you will face. Instead, we offer a coherent ethos and six evidence-informed pedagogical principles that cut to the core of successful teaching: challenge, explanation, modelling, practice, feedback and questioning. We hope that the ideas we share will be useful to new and experienced teachers alike, as you look to further your understanding of how a rich climate for learning can be forged from the small details of practice.

Two values provide the bedrock for everything that follows in this book: excellence and growth. After reading Massachusetts middle-school teacher Ron Berger's wonderful book, An Ethic of Excellence, we realised that in our headlong pursuit of fashionable pedagogical ideas — such as pace, rapid progress and independent learning — we had long neglected an eternal truth. That it is our fundamental responsibility to give children the chance to be excellent. Berger writes about how he immerses students in high standard exemplar work and models, allows them to redraft their work multiple times and builds up a culture of collegiate pride. The result is a culture of craftsmanship. All children, Berger argues, are apprentice craftsmen. They should be encouraged to hone and refine their work with pride and diligence until it reaches excellence.

But excellence is hard to come by. To achieve it, a child must work hard and be prepared to face the setbacks they will inevitably meet on the journey. This is where Stanford University psychologist Carol Dweck's ideas about mindset take centre stage. Dweck has found that human beings fall roughly into one of two broad categories: those who adopt a fixed mindset and those who adopt a growth mindset. Those who think in a fixed way believe that their ability is innate and cannot be changed: I was born clever - or stupid - and that way I will remain. Those alive to the possibility of growth, however, will attribute success or failure not to an unchangeable lack of ability, but to whether they have worked hard or not. Put simply, if a child flunks an exam there are two possible attributions they might make: place the blame on their natural ability and see no need to increase their effort next time around, or seek to learn from their mistakes with the aim to do better next time.

¹ Ron Berger, An Ethic of Excellence: Building a Culture of Craftsmanship with Students (Portsmouth, NH: Heinemann, 2003).

Of course, it is the growth mindset that we must seek to encourage. Teachers and children need to realise, in Dweck's words, that 'working harder makes you smarter' and that it is old-fashioned effort that unlocks improvement, not a gift granted at birth. Dweck's research demonstrates that through the language we use with young people, adults can have a huge influence on the mindset a child adopts. How we frame success and failure, and the way we promote 'struggle' as a positive state, are hugely important. Viewed from another angle, Dweck's findings point at another principle behind this book: exemplary teachers are not born great, they *become* great.

Underpinning this book, then, are the notions gleaned from Dweck and Berger that expert teachers must be uncompromising in their quest to foster pride and hard work. Nevertheless, excellence and growth are soulless, vacuous aims without good teaching to bolster them. It means very little to ask a child to adopt this philosophy if we have not furnished them with the tools that make it possible. Indeed, Muijs and Reynolds conclude that research tends to show that 'the effect of achievement on self-concept is stronger than the effect of self-concept on achievement'. In other words, teach students well and they will achieve; and if they achieve, they will begin to see themselves as successful learners. A school ethos of excellence and growth, then, can only truly be created through great teaching that leads to genuine learning.

An extensive report from the Sutton Trust entitled *What Makes Great Teaching?* argues that research evidence proves that many popular teaching practices are ineffective in improving student attainment.³ The authors name the following strategies as being myths that have little impact on

² Daniel Muijs and David Reynolds, Effective Teaching: Evidence and Practice, 3rd edn (London: Sage, 2011), p. 188.

³ Robert Coe, Cesare Aloisi, Steve Higgins and Lee Elliot Major, *What Makes Great Teaching? Review of the Underpinning Research* (London: Sutton Trust, 2014). Available at: http://www.suttontrust.com/wp-content/uploads/2014/10/What-makes-great-teaching-FINAL-4.11.14.pdf.

learning: lavishing low achieving students with praise; encouraging students to discover ideas for themselves; grouping by ability; rereading as a revision tool; attempting to improve motivation before teaching content; teaching to 'learning style'; and the idea that active learning helps you remember.

However, the two factors linked with the strongest student outcomes are:

♦ Content knowledge. Teachers with strong knowledge and understanding of their subject make a greater impact on students' learning. It is also important for teachers to understand how students think about content and be able to identify common misconceptions on a topic.



◆ Quality of instruction. This includes effective questioning and the use of assessment by teachers. Specific practices, like reviewing previous learning, providing model responses for students, giving adequate time for practice to embed skills securely and progressively introducing new learning (scaffolding) are also found to improve attainment.



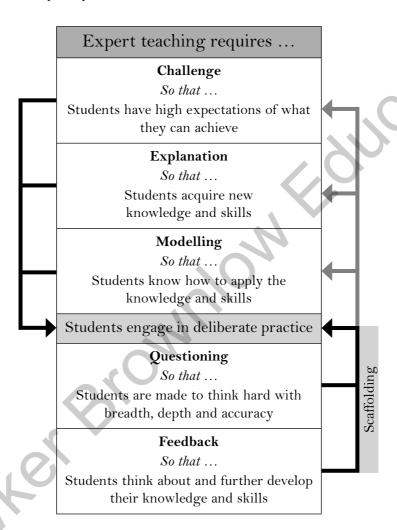
It would be a mistake to adopt the broad brushstrokes of such findings crudely or uncritically. Our joint experiences have demonstrated again and again that schools should never underestimate the practical wisdom of the classroom teacher. Careful day-to-day decision-making, informed by years of thinking and practice, is vital. Situational factors have a huge influence too. Great teaching is not a single entity; it varies enormously from school to school, from subject to subject and from classroom to classroom. What makes you an exemplary practitioner in your environment might not make us exemplary teachers in ours — and vice versa. Needless to say, it would also be a grave mistake to dismiss the findings highlighted in the Sutton Trust report, and so the ideas shared in this book do lean on this and other sources of evidence, such as cognitive psychology.

It follows, then, that this book will combine three aspects when coming to a definition of effective teaching: what the research evidence suggests; what we have learnt from inspirational teaching colleagues at our school and in the burgeoning online education community; and, most of all, what we continue to learn from our day-to-day experiences as classroom teachers.



We have targeted six interrelated pedagogical principles. Inspired by the legendary rock band Led Zeppelin, ours is a 'tight but loose' approach. We have highlighted a few essentials to great teaching but leave you free to implement them and connect them as you see fit.

The principles work as follows:



The first principle, *challenge*, is the driving force of teaching. Only by giving our students work that makes them struggle, and having the highest possible expectations of them, will we be able to move them beyond what they know and can do now. This will be the focus of Chapter 1.