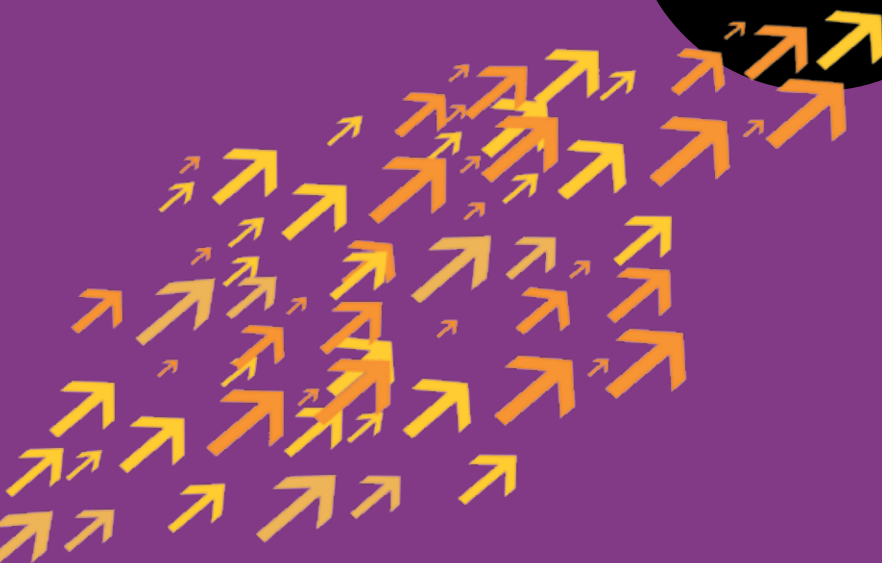# SSAT

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Redesigning Schooling - 2

What kind of teaching for what kind of learning?

Guy Claxton and Bill Lucas
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**REDESIGNING
SCHOOLING**
THE CAMPAIGN FOR A SCHOOLS-LED
VISION FOR EDUCATION

Authors

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Guy and Bill are co-founders of The Expansive Education Network. Both are prolific authors. Their latest book *Expansive Education: Teaching learners for the real world*, was released earlier this year. Bill is also the author of the forthcoming SSAT title *Redesigning Schooling – 6: Why parents and families really matter.*

Editor

Peter Chambers

SSAT's purpose

SSAT believes that teachers make students' lives. As the world gets more complex, that vital role becomes ever more demanding. As the hub of the largest, longest-standing network of education professionals in England, SSAT exists to help teachers perform their job even better, more confidently and more professionally than before.

This publication

Audience: Education professionals at all stages and settings

Aims: Professors Guy Claxton and Bill Lucas address the fundamental questions: what are the desired outcomes of learning for each individual school? What kinds of teaching and learning will deliver those outcomes? And what kind of leadership will create those kinds of teaching and learning? In providing a structure and stimulus for answering these questions, the authors clearly explain and integrate much relevant work by international thinkers and leaders in education. Their analysis explains many of the ways in which our education system needs to change. It examines alternative approaches and gives guidance on how school leaders can integrate them into successful pedagogic leadership.

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Introduction

Schools are in urgent need of redesigning. While some are giving their students a genuinely fitting start to life in the 21st century, many are not. We have not yet achieved the critical mass of thinking and practice that will change the system as a whole.

The people who will be doing the requisite thinking, and exploring the necessary and effective shifts in practice, are headteachers and their staffs. Politicians are not in a good position to do this, because their time horizon is based on the five-yearly election cycle. Genuine radical change is certainly too slow and too complicated to be reduced to sound bites and election winners. Even academic educationalists, sadly, won't do it either, because they do not have the requisite sense of urgency. Their bent is mostly to be cautious, balanced, analytical, argumentative and reactive, rather than committed, imaginative and practical. With a few exceptions, they will not take the lead.

SSAT's Redesigning Schooling initiative is therefore absolutely crucial, focusing as it does on inspiring, enthusing and encouraging school leaders, up and down the country, to seize the change agenda and be bold and thoughtful in exploring new directions. Headteachers know

schools well, they know children well, and they have both the understanding and the staying power to see through innovations that will genuinely take root and make the requisite difference.

This paper has been hugely informed by conversations we had with school leaders at events co-ordinated by SSAT in London and Manchester during 2013. We hope it will distil what we have heard into a rallying cry for many others.[1]

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Our discussion is structured around four fundamental questions, which sit at the heart of the redesigning schooling process. Every headteacher needs to consider:

1. What are, for your school, the desired outcomes of education (DOEs)?
2. What kinds of learning, in your school, with your students, will deliver your DOEs?
3. What kinds of teaching will lead to the kind of learning that is needed?
4. What kind of leadership is required to create the kinds of teaching and learning which are desired, and so ensure that students leave your school with your DOEs?

The first of these four interlinked questions is obviously of central importance. Every school needs to have a clear, precise specification of the knowledge, abilities, attitudes and values which it wants all its young people – especially those who are not going to be 'winners' at the examination game – to have acquired by the time they leave.

You cannot move on to the second until you have answered it carefully. Different kinds of learning processes are needed to deliver different kinds of outcome. The practical understanding of Ohm's Law needed by an electrician is different from the decontextualised, paper- or screen-based performances required by an A-level physics paper, for example. More fundamentally, the learning that develops a deep disposition to be curious, say, is different from the learning that results in a passive, compliant attitude towards knowledge.

Teaching is a way of engaging different kinds of learning processes in learners' minds, so you can't say what kind of teaching your teachers need to do, to deliver your DOEs, until you have responded to the second question.

Whether you create a studio environment, or sit students around a Harkness table, or set up role-play situations, isn't a matter of some nebulous idea of 'good teaching'. It depends on stimulating and engaging the kinds of learning that will deliver the outcomes you said you valued. This third question is complex because its answers are also dependent on a combination of research, experience and personality, as well as on a range of assumptions and beliefs about the teaching process.

Only when you have some clarity about the first three questions can you begin to prioritise the leadership strategies that will cultivate the necessary kinds of teaching. If you decide that you want students to play a greater role in designing and monitoring their own education (because you have decided you want to build qualities of independence and self-evaluation, say), you may have to organise CPD in the school so that teachers become more confident in sharing increasing amounts of control with their students. (The evidence that orchestrating the nature of professional learning is one of the most important roles for school leaders has been widely promulgated by Dylan Wiliam).[2]

Chapter 1

Teaching and learning to what end?

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Let's unpick these four questions a little more, starting with the first. Any design process starts from clarity about purpose and function. Whether it be a new computer game, a folding bicycle, or a 21st century school, you cannot know whether your design is any good unless you have a specific idea of what 'good' would look like. What drives design are the questions: what is it meant to do? For whom? All other decisions – What shall we make it of? How expensive is it going to be to make? What colours shall we paint it? And so on – are linked back to and motivated by that fundamental sense of purpose.

So 'redesigning education' has to begin with careful thinking about our old friends vision and values. Specifically, what is the fundamental purpose of compulsory education? What is it that we think all young people need to know, believe, value and be able to do, if they are going to flourish in the complicated and turbulent world of the 21st century? What is it that we can't be sure they would acquire if schools were not there to provide it? Once we have some clarity about the desired outcomes of education we can start to think about how best – most efficiently, economically, reliably and enjoyably, say – to produce them; but not until.

Current thinking about educational reform hardly ever does that. It starts with what we have and tinkers with it, rather than going back to the drawing board. That's why so much so-called reform just sails round in circles. You only have to compare the complaints about education, and the nature of the ensuing debate, from the 1850s with those of today to see that. It was in 1856 that educational reformer Joseph Payne bemoaned excessive testing in his memorable observation:

> 'Continually pulling up the plants to see the condition of the roots, the consequence of which is that all natural growth is stopped... Making quantity, not quality [of learning] the test of your results, you shall fail in securing either quantity or quality.'[3]

Today's political debates are depressingly similar. They are obsessed with literacy and numeracy, with examination results and university entrance, and (a new obsession this) with our nation's position in international league tables of educational performance, as measured by standardised tests. Nothing wrong with those as far as they go – but is that really the gamut of desirable outcomes of education, in and for the 21st century?

Notable examples of national educational redesign

Not for many countries round the world, it isn't. Look at the redesigning that is going on in Singapore, New Zealand, Australia and Ireland, for example. You will find that the DOEs are being couched not in terms of examination results and places at posh universities (with small corners at the bottom of the screen for impressive performances by the 1st XV and the school orchestra). Instead they are couched in terms of the *personal qualities* that the school system explicitly, deliberately, aims to inculcate.

Singapore's DOEs, for example, include the production of every young Singaporean as

- a **confident person** who is adaptable and resilient, knows himself, thinks independently and critically, and communicates effectively;
- a **self-directed learner** who takes responsibility for his own learning, who questions, reflects and perseveres in the pursuit of learning;
- an **active contributor** who is able to work effectively in teams, exercises initiative, takes calculated risks, is innovative and strives for excellence.[4]

These countries – and dozens like them – are also explicitly acknowledging that society has changed, and that the skills and interests of young people have also changed. This means that the aims and designs of schooling have to change too. The new national curriculum in Australia, for instance, states:

'Education must anticipate the conditions in which young Australians will need to function when they complete their schooling… [and] needs to acknowledge the changing ways in which young people will learn.'[5]

In all these countries, people are trying to do the hard work of thinking through the implications of these shifts in influences and aspirations for the design of schooling. In this country, we hear not a squeak on such matters from the Secretary of State for Education, just a repetition of tired and groundless assertion about 'rigour', 'standards' and ever 'higher expectations'.[6] In England, more than elsewhere, it is people who work in schools, and run them, who are not only best placed to do this heavy thinking, but the only people who seem inclined to do it. If we are going to make progress with redesigning schooling, we have to cut through the lazy rhetoric. There is no such thing as 'best practice'

in teaching, or a 'world-class' school. Those aspirational epithets are meaningless until you say what the desired outcomes are. Best practice – for what? World class – at what? We must keep remembering those DOEs, and reminding ourselves that, for most of us, they include attitudes and values as well as knowledge and skills. Otherwise, we risk continually falling back into the familiar, unwitting preoccupation with test scores, and with training only the limited abilities to discuss and manipulate knowledge on which those scores depend. And we will then be back chasing our tails, trying to squeeze marginal improvements out of a system that was designed for the 19th rather than the 21st century.

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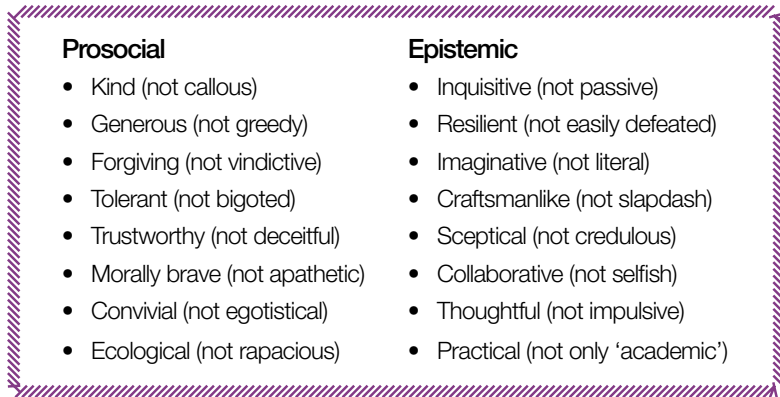
Education as a moral project

Schools are moral enterprises. Their cultures and practices are saturated with value judgements about what is worth learning and knowing (e.g. cerebral vs manual), how best to display your knowledge (e.g. through the written word vs through acting), who has a right to question or adapt knowledge (e.g. students vs not students), the valid hallmarks of intelligence (e.g. knowledge retrieval vs practical expertise), and so on.[7] In redesigning schooling, we cannot afford to be squeamish about these moral bedrocks of school. We cannot opt out, and magic them away with weasely words like 'standards', 'rigour' and 'high expectations'. Standards – of what? Rigorous – at what? Expectations – about what? Redesigning schooling is not principally a technical matter; it is first and foremost a moral one. Our only choice is to face it or fudge it – and pioneering schools and nations are the ones with the integrity and courage to face it.

As noted, there is a remarkable degree of overlap in the qualities of mind that these countries have singled out as the ones of greatest value for citizens of the 21st century – and therefore the ones they have to figure out how best to cultivate. Some of them are shown in figure 1 below, with their implied antitheses in brackets.

Figure 1: Commonly desired outcomes of education

Prosocial
- Kind (not callous)
- Generous (not greedy)
- Forgiving (not vindictive)
- Tolerant (not bigoted)
- Trustworthy (not deceitful)
- Morally brave (not apathetic)
- Convivial (not egotistical)
- Ecological (not rapacious)

Epistemic
- Inquisitive (not passive)
- Resilient (not easily defeated)
- Imaginative (not literal)
- Craftsmanlike (not slapdash)
- Sceptical (not credulous)
- Collaborative (not selfish)
- Thoughtful (not impulsive)
- Practical (not only 'academic')

The DOEs are broadly of two kinds, which we have called 'prosocial' and 'epistemic'. The prosocial ones are to do with cultivating the attitudes of a good friend, a good neighbour or a good citizen. The epistemic ones are to do with the qualities of mind of the powerful learner: a person who is able to meet difficulty and uncertainty with confidence, capability and enthusiasm. The major challenge for the 21st century school is how to design itself so that it functions, day-in, day-out, as an effective incubator of its chosen virtues. It is all too easy to pack the prospectus or the home page of the school website with fine words, but they famously butter no parsnips. Merely knowing what makes a good friend or a brave learner is no guarantee at all that the knowledge will automatically seep into the daily habits of the school members – students, teachers and other staff. Understanding what it

takes to design a school so that the *espoused* values do gradually become *enacted* values: that takes thought, solidarity and determination.

Expansive education across the world

Of course there are a great many variants of figure 1 around, some arising from research in the social and educational sciences. For example, you can find differing versions in Art Costa's 'habits of mind',[8] David Perkins and Ron Ritchhart's 'thinking dispositions',[9] the OECD's 'key competencies',[10] and Guy Claxton and colleagues' 'learning habits'.[11] Each of these initiatives has shown how small shifts in classroom procedures can contribute to both raising attainment *and* developing successful learners. These are the kinds of evidence-based approaches that school leaders choose, because they wish their students to get good grades *as well as* developing desired prosocial and epistemic qualities. The expression 'expansive education' collectively describes these and other cognate enterprises.[12] Evidence from across the world shows how schools are implementing such ideas.[13] Examples in our book *Expansive education: teaching learners for the real world* range from primary schools in the Isle of Man, southern Poland, rural Finland and inner-city Auckland, through Spanish-English bilingual schools in Argentina, to apparently traditional independent schools such as Eton College and Gordonstoun in the UK, Newington and Toorak colleges in Australia, as well as state-run further education colleges in several countries.

In redesigning schooling the important thing seems to be, not deciding which list of DOEs to take off the shelf, but turning these templates into a version that has traction and gets buy-in at an individual school. Whatever the list, it needs to be accessible and appealing to those people who will be working with it: teachers, students, parents and the wider world.

Cultures of and for learning

A school signals its values through different aspects of its culture. There are the visible, public espousals of these values through brochures, websites, speeches, newsletters and other publications. But values are also carried through the kinds of reports that are written about students, and through the honours boards and other ostensible definitions of 'success' such as trophies, photos of noteworthy achievements and displays of students' work.

Most importantly, values are conveyed moment-by-moment by teachers in classrooms. They come out through teachers' running commentary on students' struggles, achievements and behaviour; through the kinds of activities they create; through the way they lay out the furniture in their room, or configure group work; and through the kind of language they use and the example they set.[14]

> Values are conveyed moment-by-moment by teachers in classrooms – through their running commentary; the kinds of activities they create; the way they lay out the furniture or configure group work; the kind of language they use and the example they set.

For example: do teachers welcome correction from students when they make a mistake, or do they get defensive and indignant? Do they show interest and appreciation when a student asks a difficult question to which the teacher does not have a ready answer, or do they ignore or disparage such 'audacity'? Do they speak in a way that invites critical engagement by students, or does a declamatory tone convey the message 'I am telling you the truth, and your only job is to understand and remember correctly'?

Many people are now arguing that it is the fine detail of teaching that encourages the expression and development of certain habits of mind, and discourages others. The redesigning of schooling has to pay critical attention to pedagogy. Answers to the first of our four questions lead inexorably into discussions on the nature of teaching and learning. This is the ground from which a genuinely 21st century education will ultimately emerge.

Restrictive practices in England today

Since the coalition government took office in the UK in 2010, there have been visible changes to the kinds of schools that make up our system. Some of these were set in train by the previous government – university technical colleges (UTC) and studio schools, for example; others are more recent coinages such as primary academies and free schools. The political rhetoric around these changes signifies greater autonomy for schools and, ostensibly, less centralised regulation.

The perceived reality expressed to us at the SSAT events and in our many visits to schools is different, however. School leaders frequently express degrees of fearfulness about the negative impact that Ofsted judgements, for example, can have on their genuine attempts to take risks in the interest of improving learning. For example the EBacc, as originally conceived by Secretary of State for Education Michael Gove in 2012, has been withdrawn. But many school leaders tell us that recent changes to the ways GCSE scores will be used in league tables is likely to have the same effect – restricting student choice to favoured academic pathways. Government protestations that schools retain considerable discretion, and that 'brave heads' will continue to make full use of them, seem disingenuous in the face of these high-stakes performance indicators. The increased emphasis on end of course 'paper and pencil' examinations seems perverse in the context of the many current attempts to match the method of testing more closely to the real world utility of what has been learned at school.

Apart from the laudable endeavours of some UTCs, there has been little attempt to think seriously about the 50% or so of secondary students for whom the diploma and many vocational qualifications had been and are currently designed. The so-called 'TechBaccs' under current discussion could merely be a wrapper of existing qualifications, not an indication of any more thoughtful redesign. However, both City & Guilds with its TechBac® and ASDAN with its Modern Baccalaureate are developing interesting attempts to create a genuinely alternative learning and assessment route.

At primary level there have been some sensible changes of heart with regard to the content of English, geography, computing, and design and technology. But the new tests at the end of key stage 2 will rank a cohort of pupils in 10 bands, each containing 10% of the cohort's pupils. Parents will receive a letter from the government telling them exactly where their children are placed in this national ranking of maths learners, for example. It is not difficult to imagine how demotivating that may be for the students who will be at the bottom end of this new league table, just as they progress to their secondary school. At the heart of the government's thinking there seem to be three dubious tenets:

1. Changing organisational structures will, of itself, lead to changed teacher behaviours.

2. Tinkering with assessment procedures will produce more valid gradings and better 21st century learners.

3. Introducing more stringent high-stakes performance indicators for schools will not (or 'should not') lead schools to narrow their curricula and 'teach to the test'.

If the vision laid out in the first part of this paper is to be realised, it will be despite rather than because of such government structures.

Some principles of school redesign

At the SSAT events at which we and school colleagues tried to think our way through these issues, we agreed a number of principles to guide us in our joint work. These principles were designed to combine moral judgements about the purposes of education with evidence from research. The following eight suggested principles represent the results of these discussions with school leaders.

Eight principles of school redesign

1. The role of schools, leaders, teachers and parents is, above all, to equip learners with the dispositions they need to thrive throughout their lives in an uncertain world. One of these specific capabilities, vital for only a short period of their lives, is the ability to achieve success in examination systems.

2. Learning is learnable. It improves when learners have a clear set of metacognitive strategies which they are able to use confidently in a range of contexts, as well as a language to describe their learning experiences.

3. What learners believe about themselves matters a good deal, and a 'growth mindset' is both a powerful motivator and a predictor of success.

4. When teachers actively continue their own learning and model this in their classrooms, learners achieve more.

5. Learning works well when it builds on pupils' prior experiences and is (in some sense) 'authentic'.

6. Learners do best when they have clear and stretching goals and learn in an environment rich with formative feedback, with many opportunities for reflection; the best learning is driven by highly engaging questions.

7. Learning requires opportunities to develop emotionally and intellectually, socially and individually.

8. All learners need a diet of both practical and academic experiences, within and beyond the formal curriculum.

These eight principles take us into our second question.