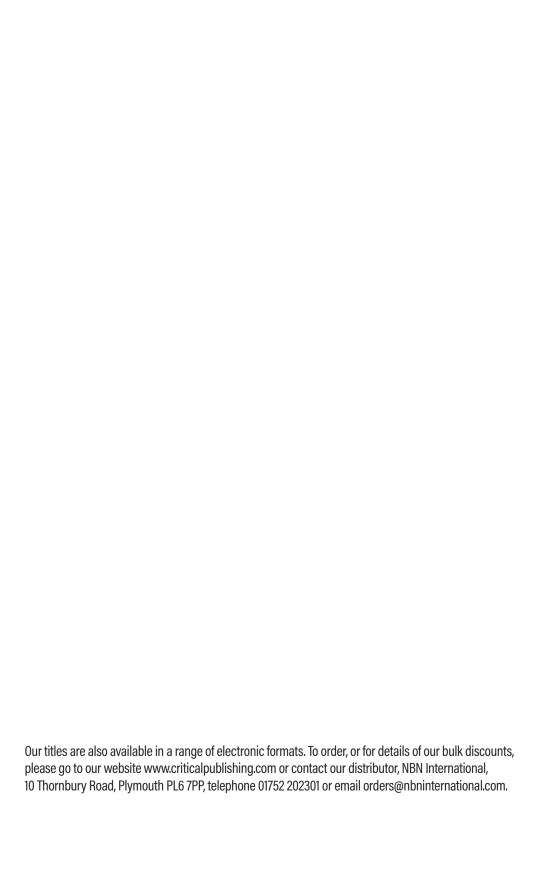
RE-EXAMINING SUCCESS

Raising pupils' examination performance at secondary school: systems, techniques, processes and partners







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David W Hughes



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You cannot teach a man anything; you can only help him find it within himself.

Galileo Galilei (1564-1642) Italian physicist and astronomer



MEET THE AUTHOR

DAVID W HUGHES

I was a teacher and senior leader within the secondary and tertiary sectors for more than 24 years, working in a range of both successful and failing schools. I have led and managed improvement projects at local authority, regional and national levels. While working on the Building Schools for the Future programme, I was seconded for almost two years to support the development of the Opening Minds curriculum, devised in collaboration with the Confederation of British Industry as a twenty-first-century learning model for schools, which mirrored the world's most effective educational systems and addressed the attitudes,

behaviours and competences required of the modern learner. I am an associate of the University of Nottingham School of Education and a writer for the educational press.

I post regularly on my blog: https:// learningrenaissance.wordpress.com/

This is a resource focused on the future of learning at a time that could well be termed the Renaissance in Learning. The aim is to share innovative practice and resources to help create a climate in which every learner can succeed.

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Author dedication

I'd like to pay particular tribute to my wife, Jane, who took my febrile notes and turned them into short sentences with appropriate grammar and punctuation for publication. This is the second time she has endured this process in my support.

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INTRODUCTION

Motivation and purpose

My primary motivation for writing this book is as an act of pupil advocacy. The examination process is a particularly harsh ordeal to impose on a person of any age. But, for young people in secondary schools, it tests their emotional resilience at a time of a tsunami of changes in their lives. I characterise the interests, motivations and progress of the learner as the micro-level of analysis within the book.

My secondary motivation is to challenge teaching colleagues to look more fundamentally at the process of preparing all pupils for examinations. This is the macro-level of analysis. Specifically, I have three concerns:

- To explore the relationship between the learning regime across the two years of a GCSE level or Advanced level syllabus and the 'revision period' to see if expectations, processes and activities are congruent from the point of view of the pupil.
- 2. To come to a belated realisation that approaches to examination preparation, if they are to be successful, need to be personalised to the needs of the individual learner. If they are not, and every pupil has the same diet in a revision programme, you disenfranchise the most vulnerable and insecure learners to underachieve in the examinations, with related damage to their subsequent learning mindset and life chances.
- 3. For pupils to achieve to their full potential, schools cannot grant study leave without ensuring they have addressed parents' concerns. Parents want to support their children to make the most of this independent study period so they arrive at the examinations calm, well-prepared and positive they can overcome the examination challenge.

These three considerations underlie a more fundamental concern that teachers need to address, namely what constitutes success in the examinations for individual pupils. This is where the micro elements that drive the individual pupil overlap with the macro-level of whole-school concerns.

Within the 30-year span of my teaching career, the orthodoxy was that the purpose of the school was to maximise the examination success of every pupil. This, after all, was the foremost arbiter of the success of the school. Indeed, as an institution, it would be difficult for a school to focus on any other statement of intent. Parents wanted this, pupils wanted this, the state wanted this, PISA international education comparisons emphasised this and senior leadership teams, the governors, and Ofsted were charged with ensuring that this was the case in every school.

This focus on school responsibility and accountability, which was both laudable and necessary to enhance pupils' life chances, did have a considerable downside. This was the emphasis on more efficient ways to deliver curriculum content, rather than with broader concerns about the effectiveness of the learning received and implemented by the individual pupil.

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Why I am qualified to write this book

My teaching experience has been confined to the English education system. However, my career has spanned experiences in a very wide range of schools, in part due to secondments and project management experience at local authority and national levels. This led to my work with leadership teams and individual teachers on learning transformation projects and cultural changes in learning models.

I have also visited schools in other countries to explore how they address their macro-level drivers and the experiences of pupils at the micro-level.

In the past decade, social media and technological developments have enabled me to collaborate with, and learn from, the experience of teachers and learners worldwide. I have helped to develop online courses for Master's degrees in Educational Leadership and have mentored trainee teachers across the globe. Conversations with teachers from five continents indicate that the concerns regarding revision strategies and the relationship between revision and more general learning outlined in this book represent a universal concern.

A great source of inspiration for me has been the input of former pupils going back to the start of my teaching career. I have been honoured by invitations to a number of student reunions, and, since I finished full-time school teaching, social media has put me in contact with many more former pupils, some of whom are now middle-aged. I am always interested in their experiences after school and how happy and fulfilled they are. They are always keen to remind me of memories of incidents and experiences in my classes or on residentials.

What strikes me about their anecdotes is that not one recounts a factual thing I taught them. Every anecdote focuses on not the *what* but the *how* of learning. I find this particularly gratifying as I have, since my own school days, had an interest in what, at the time, could be encompassed by the term 'study skills'. This has now expanded to include a whole plethora of elements comprising emotional and physical resilience and well-being, metacognition and independent learning.

My teacher training at the University of York was in a department that contained the Centre for the Study of the Comprehensive School and was devoted to leading research on effective learning. I was committed to a learning approach that emphasised a holistic idea of the *how* of learning, rather than being committed to subject knowledge per se. I had completed a multidisciplinary degree, and found in York's Education Department a commitment to integrated courses in which pupil initiative, independent learning and interpretive skills were promoted.

I determined to teach and lead humanities departments comprising English, history, geography and religious education. I always held a more rounded view of learning than colleagues in single-subject departments. Where they emphasised the uniqueness of their subject content and methodology, I looked to develop a series of learning strategies that emphasised the unity of approaches to learning and teaching.

Seeing the child as an individual and being cognisant of particular circumstances

We are in the midst of what some commentators consider to be a 'mental health crisis' in secondary schools. The purported reasons for this are many and various, most lying outside the remit of education, but nonetheless impacting on it. In preparing pupils for the national statutory examinations, schools need to ensure that they are doing all in their power to support the health and mental well-being of their pupils. This requires that schools are proactive in supporting pupils through the full examination period in a way that few schools are currently addressing.

Child mental health and well-being were to be a short postscript to the book but, in the course of researching, two disturbing reports were published about child mental health. The first was compiled by NHS Digital (2019) and the second by the OECD (2018). The first focused on the UK, while the second was concerned with the whole of Europe. They came to some strikingly similar conclusions, which many have chosen to describe as a child mental health crisis in their scale and intensity.

Although a wide range of behavioural and emotional conditions were reported to have sharply increased in incidence across childhood, there were particularly high spikes of depression and anxiety associated with the ages 13 to 18. Coupled to the natural growth and hormonal changes that accompany the teenage years, it is clear that emotional and mental health are most in jeopardy across the teenage population precisely at the time of the national examinations.

I consider this new information warrants a chapter in the book devoted to addressing the issues of child mental health related to the examinations.

Even if we set aside the mental health and well-being elements of young people, the examinations do not constitute the 'level playing field' they purport to be. The examinations, particularly in their 'study leave' element, make massive assumptions about the ability of pupils to respond effectively to a period of independent, autonomous and self-regulated study.

A comfortable and quiet room, books and materials, access to the internet and regular food and drink might be considered as basic requirements, but even these are beyond the reach of a large and ever-increasing group of pupils growing up in poverty.

Coupled to those in care, those in hospital and other socially vulnerable families, the egalitarian and fair premise on which the examination system is based erodes quickly. The standard examination becomes deeply weighted towards those pupils in relatively prosperous households, with robust support systems from the family and every opportunity to be successful in the ordeal of the examinations.

Government statistics for the UK published in 2019 indicate that 3.5 million children (26 per cent) (Francis-Devine et al, 2019) live in absolute low income. This trend is continuing to grow, mostly

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due to the working poor having incomes that are shrinking relatively. That represents one in four children in schools generally, and significantly more than that in the poorest wards in the country.

The book intends to address these issues and suggest some ways in which every pupil can thrive in their general learning, and develop the independent and autonomous learning skills necessary to thrive in the examination system and in life beyond school.

Threats and opportunities

From the above, it might be considered that I am arguing against the format of the current examination system per se. I would deploy that argument if I thought it had even the remotest chance of being successful. However, that argument must wait for riper times of change. In the meantime, we must deal with the reality of the examinations as they currently exist and seek to ameliorate their worst aspects and prepare young people far better to survive them and thrive.

Nevertheless, this book is written at an interesting and potentially more receptive time for its message. The direction of travel in English education (although I sense parallels from conversations with colleagues in American, Australian and Indian schools) has been to enshrine the public examination as a gold standard of assessment.

Under a previous British Education Secretary, notorious for believing that he had heard more than enough of the words of experts, the return to formal written examinations and the abandonment of coursework was a necessary requirement of a 'rigorous system' (Mance, 2016; Meikle, 2012).

This was despite the fact that coursework was a broader examination of the skills of an individual pupil, requiring individual research, hypothesis testing and presentations skills to be deployed. This argument was couched in terms of a lack of rigour in the assessment of coursework components and concerns about performance inflation by teachers on behalf of their pupils. The corollary was that the examination provided an unimpeachable 'level playing field' that was beyond the ability of individual teachers to influence.

Move forward a few years and now we have concerns that the ruling orthodoxy in government dogma of schools being held accountable for producing exponential and continual improvements in pupil outcomes is producing 'examination factories'. This ethos is producing the collateral damage of the mental well-being of pupils and staff. Mental health is sacrificed to the short term good of maximising examination achievement.

The summer of 2018 has seen reported evidence of the widespread use of 'off-rolling' of pupils out of A level courses if their projected performance undermines the global achievement figures of the educational establishment. There have been reports of grade deflation and inflation in key stage testing so that schools can maximise the added value that they confer on the educational attainment of their pupils.

Her Majesty's Chief Inspector of Education, Children's Services and Skills, Amanda Spielman, has commented negatively on the 'examination factory' mentality of many schools and the toll it is taking on the mental well-being of pupils, as well as issues related to the recruitment and retention of staff (Adams, 2018).

So perhaps more radical, fundamental change is coming, at a cultural and national level, which will provide pupils with a more rational and equitable pathway to access their future goals.

Structure of the book

Given the points regarding school structures and cultures, pupils' learning and motivation techniques, and parental involvement and support of learning, the book is divided into these three elements.

Each element gives the school leader and teacher access to research and observations that support a review and regeneration of how they prepare pupils for formal examinations.

As a minimum, it is hoped that the book will provoke a review of the revision practices provided for supporting pupils in examinations.

I would hope that schools would make more profound use of the book to support a cultural review of how they teach, how they prepare pupils and engage parents in a holistic programme of support prior to and during examinations.

Such a comprehensive programme enables all pupils to truly maximise their potential and have meaningful choices as to how to continue their education beyond statutory age in further or higher education.

That the examination techniques introduced here can help to give pupils a growth mindset and a structured and fearless attitude to examinations is all the better, for such an attitude is the basis of the successful independent and autonomous lifelong learner, on whom the future prosperity of the country depends.

Within the book, triangulation points are used as pauses in the narrative to enable readers to reflect on the chapter content and compare it to their own circumstances and experiences. These may also contain prompts to help develop new understanding into individual and school research avenues or technique development.

My personal experiences in change management in engagement with pupils, teachers, senior leaders, governors and parents are recounted in 'Case studies'. These ensure that I ground any theoretical analysis with practical implementation examples.

Each chapter has a reading list to enable further research, with particularly significant texts highlighted and explored in more detail.

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References

Adams, R (2018) Ofsted Inspectors to Stop Using Exam Results as Key Mark of Success. *Guardian*. [online] Available at: www.theguardian.com/education/2018/oct/11/ofsted-to-ditch-using-exam-results-as-mark-of-success-amanda-spielman (accessed 19 September 2019).

Francis-Devine, B, Booth, L and McGuiness, F (2019) Poverty in the UK: Statistics. [online] Available at: https://researchbriefings.files.parliament.uk/documents/SN07096/SN07096.pdf (Accessed 19 September 2019).

Mance, H (2016) Britain Has Had Enough of Experts, Says Gove. *Financial Times*. [online] Available at: www.ft.com/content/3be49734-29cb-11e6-83e4-abc22d5d108c (accessed 11 September 2019).

Meikle, J (2012) GCSEs Are Dead: The EBacc is the Future, Says Michael Gove. *Guardian*. [online] Available at: www.theguardian.com/education/2012/sep/17/gcse-ebacc-michael-gove (accessed 11 September 2019).

NHS Digital (2019) National Study of Health and Wellbeing: Children and Young People. [online] Available at: https://digital.nhs.uk/data-and-information/areas-of-interest/public-health/national-study-of-health-and-wellbeing-children-and-young-people (accessed 11 September 2019).

OECD (2018) Children & Young People's Mental Health in the Digital Age: Shaping the Future. Geneva: Organisation for Economic Co-operation and Development. [online] Available at: www. oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf (accessed 19 September 2019).

Section A

BUILDING A WHOLE-SCHOOL PROGRAMME FOR LEARNING TRANSFORMATION

This book is organised into two sections. Section A explores what amounts to a mandate for progressive change in the way education works. It is based on recognising the redundancy of much that we take for granted in the priorities, structures and practices in current schools.

From term times to lessons, content to delivery, from teacher exposition to the examination system, much of the daily work of schools is extremely wasteful of the talents of the young people for whom access to learning represents their preparation for a changing future.

We have seen in the crises of teacher recruitment and retention that it is equally corrosive to the mental and physical health and well-being of those charged with delivering the existing model of learning.

We are, in effect, trying to impose an increasingly dysfunctional, historical model of learning onto a rapidly changing future. We seem to be in thrall to those, many of whom are politicians, who believe that the best way to address the future is to double down on existing practices and structures.

This book is a call to arms for teachers – to you! For you to have confidence in your professional expertise and determination to learn from others and so improve the lot of all pupils; to equip pupils to survive and thrive in the challenges and opportunities the future will hold for them.

Section A provides insights for educational leaders to explore more comprehensively the range and scope of changes needed to revitalise and repurpose educational provision in their own schools. The section proceeds from a survey of the wider educational drivers and processes at the national level down to the analysis of teaching and learning priorities and strategies. International comparisons are introduced to show the direction of learning in countries that have a more rational and intimate view of the patterns and requirements needed to shape future provision.

For the sceptics, or the complacent, a case study is provided at the end of the section in Chapter 8, showing how the most fundamental realignment of education and learning was conceived and delivered in an English school.

Section A

Section B BUILDING WITH AND FOR PUPILS: AN INCREMENTAL APPROACH

Section A concerned itself with transforming learning on a whole school basis to promote learning excellence more widely. It assumed the senior leadership team and governors were ready, and able, to fundamentally review all aspects of the learning experience of the pupil.

Not all schools are in a position to contemplate such massive changes to their culture and way of working. They may consider that circumstances are not right, resources are not available, or staff and governors are not committed to such change. To the extent that others have already made such giant leaps of faith and commitment to future learning, they are potentially wrong in this assumption. However, there are costs to being early adopters of new ideas. These perhaps introduce elements of risk that leadership teams are unwilling to bear at the current time.

Nevertheless, in the absence of a commitment to wholesale change, there are a number of approaches, initiatives and teacher research-led projects that can be implemented. These should be considered as confidence-raising exercises to develop awareness, experience and methodologies for the more extensive changes that inevitably lie ahead.

Section B concerns itself with these smaller-scale elements that a department, or even an individual teacher, can contemplate and introduce at an experimental level.

The quality of such experimentation will be improved if the exercise is developed with buy-in from the senior leadership team and to an agreed and developing experimental rationale.

That the experiment is developed with a commitment to share methodologies, progress and results with others might represent the beginnings of the action-research programme of the school. Action research is part of the process of scaling the reflective learning posture of individual teachers into a mechanism for wider and sustainable change among the whole staff. This is the essence of an incremental approach to change. It centres on the quality of pupil engagement and learning progress.

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