Confederation
of School Trusts

Looking to the Future Without Trashing the Past

Part of the CST 'A Bridge to the Future' series

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In 2010 he published 'Could do better' which laid down the principles for the review of the National Curriculum in England. He was chair of the Expert Panel for Review of the National Curriculum in England. Emerging from this review, subsequent research on the quality and function of textbooks and other resources has been taken up around the world.

He chairs various curriculum groups for the Department for Education in England, and has undertaken system evaluation and curriculum review in various nations. He has published widely on assessment and curriculum issues, and routinely provides briefings and advice to UK and other governments.

He has worked with OECD on curriculum policy and, with Nuno Crato, recently has published analysis of the 2018 PISA results for England. He is a Fellow of Churchill College Cambridge and in 2015 received a CBE for services to education.

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Looking to the future without trashing the past

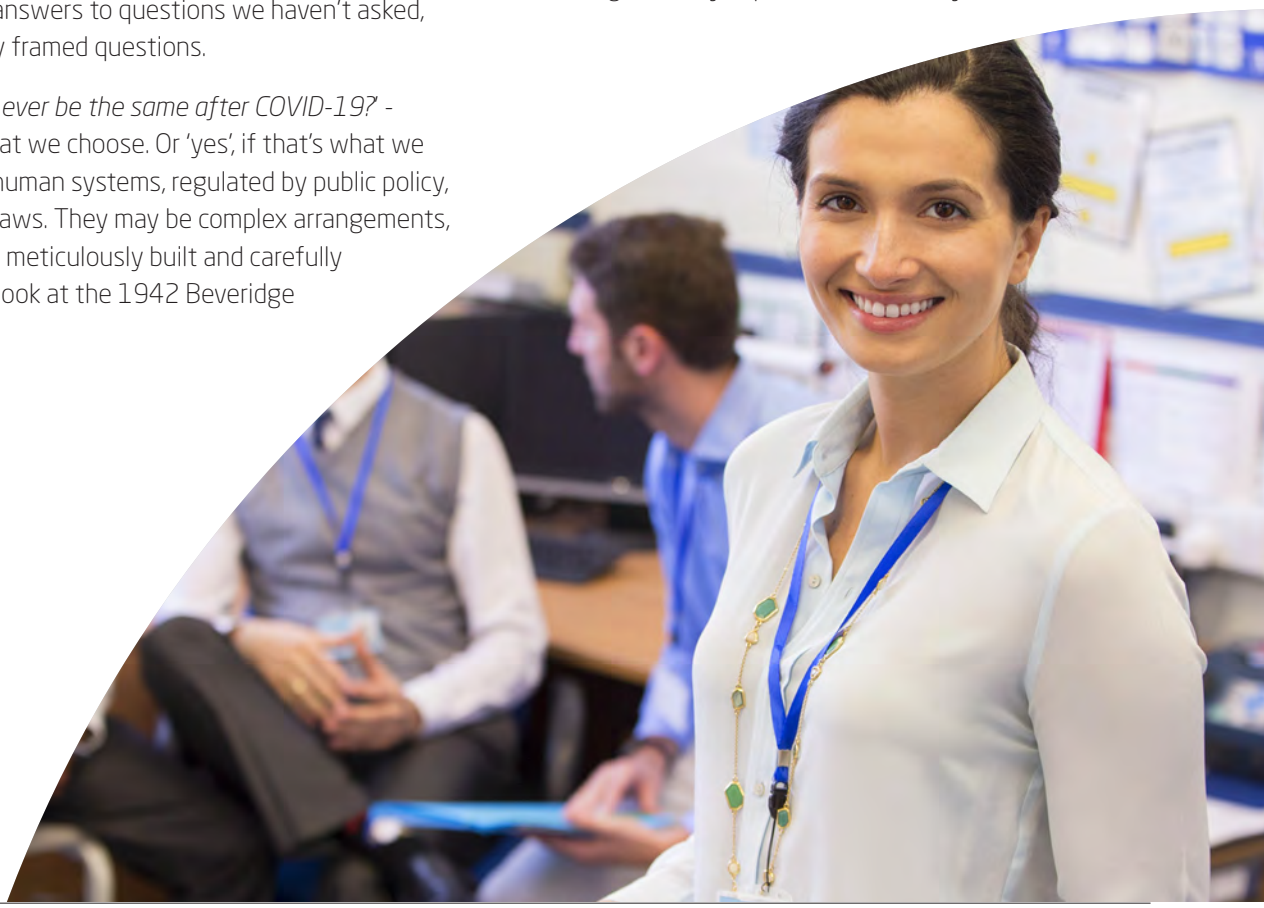
While the loud public statements about '*the future of education is like this...*' or '*...like that...*' resonate around the media and corridors of power, we need to think about the theory and practice of change. We really do. Without considering this, we could walk straight into long-term trouble.

The lessons of history, and of sound public policy, are both obvious, and often ignored. It's easy to see why; we tend to focus on the specifics: '*should we or should we not have GCSEs?*', *'does our assessment system need a complete rethink?*', *'will schooling ever be the same after COVID-19?*' People dive into the pros and cons of each question. It's a natural thing to do. But let's step back a moment and analyse things a little more.

First things first. These are BIG questions. They need careful, research-driven answers. But many of these apparent questions feel like answers to questions we haven't asked, rather than robustly framed questions.

Take '*will schooling ever be the same after COVID-19?*' - well no, if that's what we choose. Or 'yes', if that's what we choose. These are human systems, regulated by public policy, not some abstract laws. They may be complex arrangements, but they have been meticulously built and carefully refined. Just take a look at the 1942 Beveridge Report, the 1944 Education Act, or Ron Dearing's 1995 report. These contain serious, responsible, wide-ranging reviews and consequent recommendations, scrutinised by democratic government - which resulted in tangible improvements to our education arrangements. We have an excellent tradition of incremental refinement, even in extremis - remember that the both Beveridge and the 1944 Act were formulated and enacted during a time of massive social and economic disruption caused by global conflict - and certainly a level of disruption comparable to that currently being experienced.

And now, we have large bodies of evidence on what is working in our system and what is not, and who is benefitting and who is not. Ignoring these would be a big mistake. PISA[1], TIMSS[2] and PIRLS[3] all show that, since 2010, we have bucked international (downward) trends in literacy and have significantly improved in numeracy.



1 Sizmur, J. et al. (2019) Achievement of 15-year-olds in England: PISA 2018 results. Department for Education.
2 Richardson, M. et al. (2020) Trends in International Mathematics and Science Study (TIMSS) 2019: National report for England. Department for Education.
3 McGrane, J. et al. (2017) Progress in International Reading Literacy Study (PIRLS): National Report for England. Department for Education.

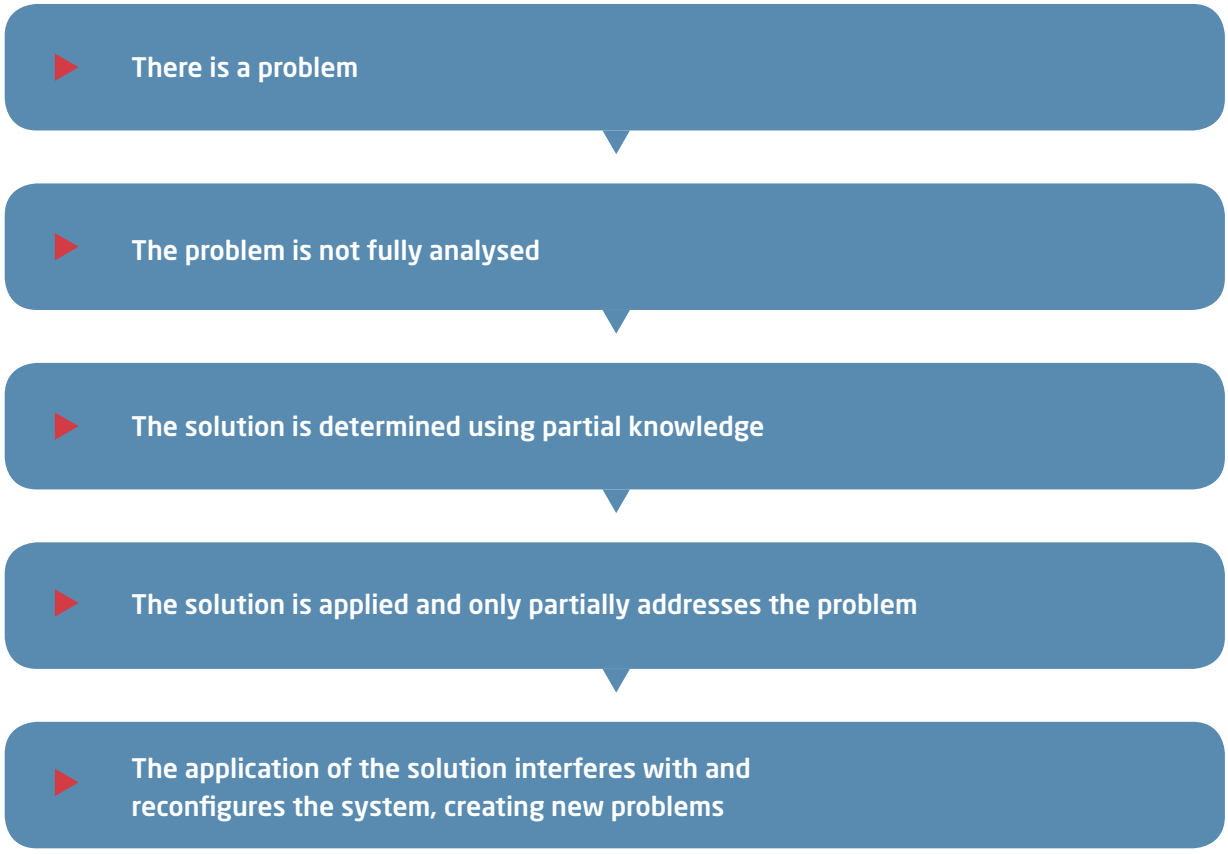
We have nibbled into the differences which are explained by social background, but not eradicated them. We continue to have highly gendered participation in some key subjects, such as Physics. As John Blake emphasises, we still do not enable all our children to read with fluency by the age of 11. We still do not have a mass participation, high quality vocational route. We are getting there, but it's not in place yet. These are genuine, protracted problems, and I for one would like to see a continuation of public policy which tackles these. So, rather than 'pet projects' of commentators and pundits, we must think about what genuine problems we have, and ensure that any proposed changes actually effect improvements in the things which solid evidence tells us are the most pressing problems.

CST's recent paper 'Coherence and Systemness: The Future of Assessment and Qualifications' [4] sets out important reasons why assessment must be viewed as part of a carefully constructed system. And we know for sure some things about the impact of system change. It rips capacity out of education systems. It adds significant workload to teachers and institutions. It makes carefully designed materials and lessons redundant. Massive change has massive impact, and systems take time to reconfigure, and return to high performance.

Alternatively, there's an excellent model which deserves more attention: Frank Achtenhagen's[5] 'Cycle of Planned Failure'. Presented at an international conference in Milan in 1994, it has been welcomed by policy makers and reformers. And it gives pause for thought. Here's what I say about it in a document dedicated to responsible educational reform[6]:

'*Premature action runs very great risk, since it not only can be an inadequate response to the real causes of poor performance - but also, by being enacted it can affect the system, creating new problems rather than remedying existing ones*'

Achtenhagen's powerful model suggest this cycle is all too evident in many nations' educational policy-making:



4 Rollett, S. (2021). Coherence and Systemness: The Future of Assessment and Qualifications. CST.
https://cstuk.org.uk/assets/pdfs/ICE_10070_CST_Future_Assessment_Whitepaper.pdf
5 Achtenhagen, F. (1994) Presentation to Third International Conference of Learning at Work. Milan, June 1994.
6 Oates, T. (2017) A Cambridge Approach to improving education. Cambridge Assessment.

Round and round the cycle we go. This all may seem a bit abstract, but I have seen the practical damage wrought by this dysfunctional, wasteful cycle in too many places at too many times. Anyone remember Diplomas? Or Individual Learning Accounts? Or the nation I was working with which had three - yes, three - versions of the national curriculum in place at the same time, since it was thought, wrongly, that simply re-drafting the national curriculum was the simple and sole means of addressing serious issues of quality at school level - which it certainly was not.

The problem is that new policy formed in error transforms the system, while not addressing the original problem. It rips capacity out of the system, as educators strive to make things work and conform to requirements and regulations. We have explored the means of avoiding or breaking this cycle. We need to:

- **Recognise that there is a problem - including less obvious ones**
- **Analysing the problem using sound domestic and/or international research**
- **Robust policy formation using dependable research**
- **Fine-tuning and adjuvant policy may be needed**
- **Effective response prevents entering the cycle of planned failure**

This is easy to say but challenging to achieve. It is *very* dependent on understanding the true nature of problems - this is absolutely essential. And although in the midst of the pandemic our arrangements have been sorely tested and found wanting in some respects, what they have principally failed in is responding to a pandemic - something which is not in the normal run of pressures on the system. We must not lose sight of the problems which we knew were present in the system in 'normal' times: the impact of social background on attainment, the numbers of young people without sufficiently high literacy and numeracy at 16, the number of pupils without adequately fluent reading at 11, the absence of a high quality, mass participation technical route.

The Covid-19 pandemic has been an extraordinary shock, and one reason for the scale of that shock in education is that our systems were running leanly and efficiently as we went into it. The lack of redundancy reduced their resilience to a shock the size of this pandemic. It has been a shock on a scale we did not plan, or invest for. But it does not change the public goods which we expect from education: equitable access to academic and technical knowledge and skills. Digital technology helped some pupils, but for sure it did not help all. Data shows clearly that learning loss has been unequal and unfair[7 8]. Far from 'the end of schooling', the learning loss figures, combined with the stress reported from 'families turned educators', mean that the formal places we call 'schools' and 'colleges' remain vital - they are full of highly professional educators, ensuring that young people acquire all the difficult and counterintuitive knowledge which is part of modern academic and technical education and which, as Michael Young[9] reminds us, cannot be simply acquired through everyday experience. In delivering the general goods of schooling educators attend not only to the acquisition of knowledge, skills and understanding, but attend professionally to the wellbeing and mental health of young people. 'Schooling' in advanced systems is sophisticated and well-developed. It has been refined over many, many years - it achieves remarkable things. Of course, it can be refined and enhanced - more on that in a moment. But in effecting that refinement we need to be very sure we are tackling the right problems - indeed tackling genuine problems.

I spoke recently to a group of leading post-16 curriculum managers. They were not pushing for reform of GCSE or A Level. Those, they felt, were good building blocks of the academic side of their provision, capable of being combined in sorts of ways to meet demand from young people and the economy. They were concerned about the numbers of young people who previously would have moved swiftly into a place in the economy but now will likely need to stay far longer in education and training, the resources needed to fund this increase in participation, the need for professional vocational teachers and teachers in shortage subjects, and the need to settle the reforms and changes to vocational and technical qualifications. This is more in line with Geoff Barton's[10] call for a '*relatively small number of changes*' to achieve world-class performance - focussing on areas such as funding, high quality vocational education and training and less 'tabloid driven' action.

7 Renaissance Learning & Education Policy Institute (2021) Understanding progress in the 2020/21 academic year. Department for Education.
8 Rose, S. et al. (2021) Impact of school closures and subsequent support strategies on attainment and soci-emotional wellbeing in Key Stage 1: Interim Paper 1. NFER & Education Endowment Foundation.
9 Young, M., Lambert, D., with Roberts, C. and Roberts, M., (2014) *Knowledge and the future school: Curriculum and social justice.* London: Bloomsbury Publishing.
10 Barton, G. (2021) General Secretary's address to Annual Conference 2021. Association of School and College Leaders.

None of this in line with what we hear from many commentators, who call for 'fundamental change' and '*the things which I have been arguing for years*'. Beware opportunism. The arguments around abolition of qualifications need scrutiny, since the underlying rationale is not what it may seem. For some, removal of accountability arrangements is the target. Getting rid of qualifications is their chosen overt means to achieve this. For others, transfer at 14 is the aim. And abolition of GCSE would facilitate this. The apparent argument is not what it seems – there are different, often unstated, goals beneath the surface.

But two sets of voices need listening to, since they align with research. And that is those who are concerned with stress on pupils, and those that continue to press for refinement in the way in which we conduct assessment and manage grade standards.

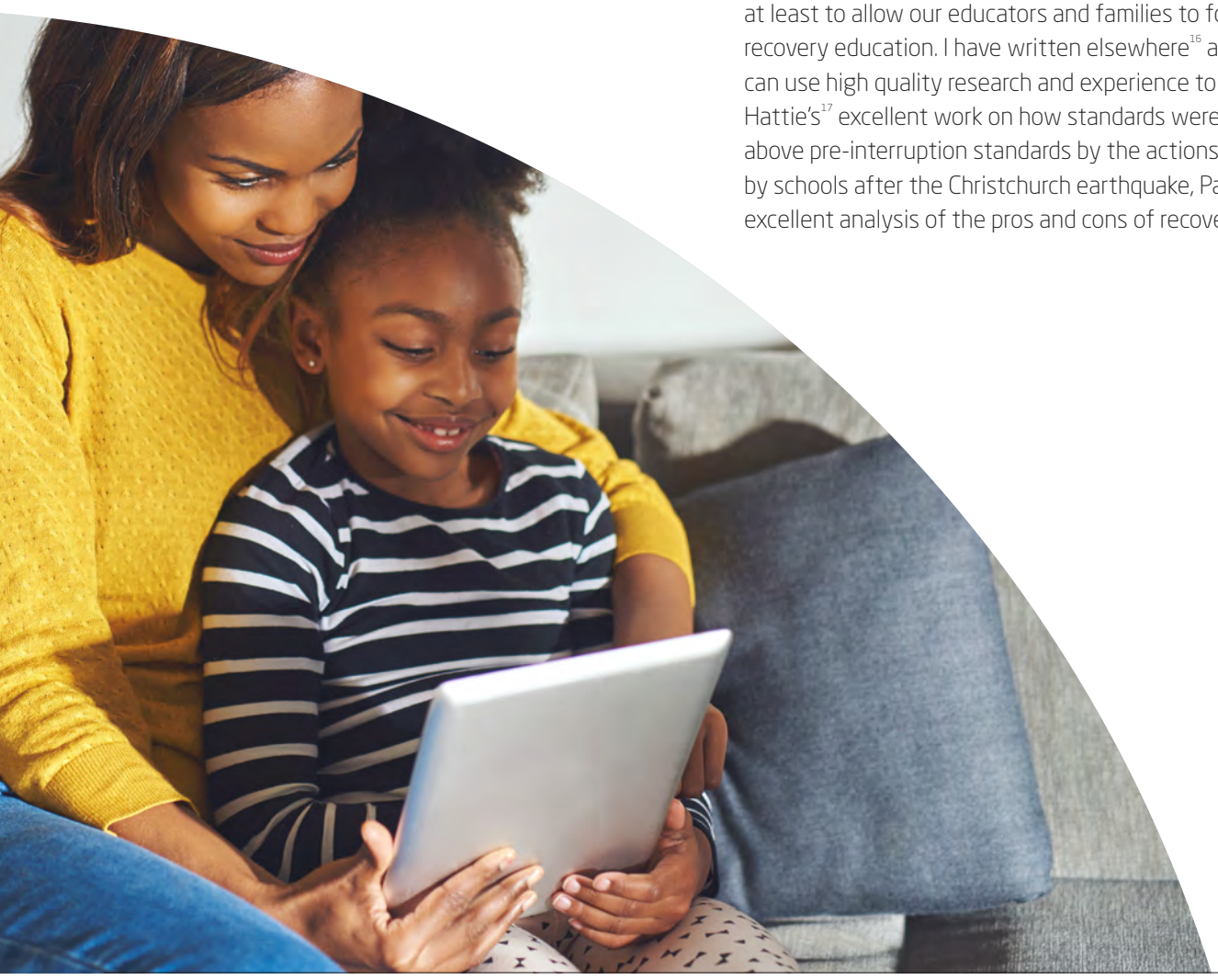
On student stress, we know that the assessment load of exams at 16 and 18 is very significant. And research shows that anxiety about performance in exams does play a key role in young people's narrative of the stress they experience. David Putwain's[11] [12] [13] excellent, long-term work on pupils' stress shows that it has many components - some deriving from life circumstances, peer pressure and so on, but some is associated with assessment. Some of this comes from the assessment processes themselves; others derive from the general air of expectation and pressure around educational performance and learning identities. A low level of stress genuinely can be beneficial to some people - accelerating performance, providing motivation, and so on. But above a certain level, it can interfere with pupils' ability to perform and this can affect our ability to fairly assess. It can induce crises of confidence, and worse. We know that stress can be transferred to pupils from institutions' own reactions to pressures from accountability.

11 Putwain, D. (2013) Assessment and examination stress in Key Stage 4. British Educational Research Journal, 35 (3), pp. 391-411.
12 Putwain, D. W. (2008). Test anxiety and GCSE performance: The effect of gender and socio-economic background. Educational Psychology in Practice, 24(4), pp. 319-334.
13 Putwain, D. W., Daly, A. L., Chamberlain, S., & Sadreddini, S. (2015) Academically buoyant students are less anxious about and perform better in high-stakes examinations. British Journal of Educational Psychology, 85(3), pp. 247-263.

Whist our schools are elaborating and refining their wider approaches to improving wellbeing and supporting mental health, it's certainly the case that we should continue to improve assessment to make it better support learning, reduce the peak of assessment which occurs at 16 and 19, while assessing and reporting attainment with high degrees of fairness and clarity. Comparable outcomes needs some scrutiny. We can, and should, continue to improve qualifications. It's important to recognise that GCSEs and A Levels have changed many times since their respective introductions in 1986 and 1952. Meticulous research has led to careful and effective refinement of qualifications which provide clear specification of learning programmes, clear standards which help with depth of treatment of material, motivating targets, quality assurance of education, rational progression, and more.

They have been refined continuously, and technology will change them again. We may be able to move beyond 'everyone doing the same paper at the same time', with adaptive assessment and high supply of alternative questions being core to this. I argue elsewhere[14] that 'flooding the system with high quality questions' - the reverse of the way we habitually have surrounded high stakes questions with security - will be the thing of the future. And this can be achieved without abolishing anything. We can achieve it by refining things. We recently have updated our 2015 study of systems around the world[15]. Far from being an outlier in having high stakes assessment at 16, we would be out of step with international trends to go for abolition, particularly if we do that whilst misunderstanding the real problems in our system, or do it for the wrong reasons.

There is a strong argument for ensuring greater resilience in our education arrangements. We need the next two years at least to allow our educators and families to focus on recovery education. I have written elsewhere[16] about how we can use high quality research and experience to do this - John Hattie's[17] excellent work on how standards were elevated above pre-interruption standards by the actions taken by schools after the Christchurch earthquake, Paul Hall's[18] excellent analysis of the pros and cons of recovery education



14 Oates, T. (2021) Increase testing as GCSEs 'fallback', says exam board. TES.
15 Suto, I. & Oates, T. (2021) High-stakes testing after basic secondary education: How and why is it done in high-performing education systems? Cambridge Assessment.
16 Oates, T. (2021) Outline principles for the future of education. Cambridge Assessment.
https://www.cambridgeassessment.org.uk/blogs/principles-for-the-future-of-education
17 Hattie, J. (2020) Visible Learning Effect Sizes When Schools Are Closed: What Matters and What Does Not.
https://opsoa.org/application/files/2215/8689/0389/Influences-during-Corona-JH-article.pdf
18 Hall, P. (2020) What Post-Katrina New Orleans Can Teach Schools About Addressing COVID Learning Losses. CRPE.
https://www.crpe.org/thelens/what-post-katrina-new-orleans-can-teach-schools-about-addressing-covid-learning-losses

after Hurricane Katrina, and the work of the International Network on Interrupted Education[19]. But Hattie in particular points to things which were done differently after interruption - it was not 'the same...only faster'. In high quality recovery education we also have the seeds of well-grounded future education. We shouldn't forget that exams are just good questions. Questions which enable us to understand how a young person thinks and what they know and can do. We need to carry on asking good questions, and use the data from them wisely, to support learning and progression.

For sure we need to explore how to increase resilience in national qualifications by cumulatively building pictures of young people's attainment, but from extant research we know that we need to avoid assessment dominating learning, overloading teachers with burden, and creating the 'credit-based mentality' which Dylan Wiliam[20] has detected in the USA - cram the learning, get the credit, forget and move on. That, we do not want.

Paul Kirschner's[21] work tells us that we should do far more of what we already were starting to do before the pandemic: upgrading discussion in the classroom by including far more rich questions in dialogue, in challenge and in the routine checking of progress. This is entirely in line with Lucy Crehan's[22] brilliant work on high performing systems, Jim Stigler's[23] work on the way in pedagogy in Japan improves attainment for all, and Dylan Wiliam and Paul Black's[24] work on formative assessment. Let's flood the system with high quality questions, and use technology to do it, in line with the amazing achievements of the prize-winning Isaac Physics, developed by Mark Warner and Lisa Jardine-Wright. We can use technology to encourage something which we know is important, which encourages thinking about subjects outside contact time. We don't need to abolish anything to achieve that, and we know that encouraging this amongst all pupils will improve both equity and attainment.

19 International Network on Interrupted Education. **https://inee.org**
20 Wiliam, D. (2011) What assessment can – and cannot – do. Pedagogiska Magasinet. **https://www.dylanwiliam.org/Dylan_Wiliams_website/Papers.html**
21 Kirschner, P. (2020) How learning happens: seminal works in educational psychology and what they mean in practice, Taylor & Francis
22 Crehan, L. (2016) Cleverlands. London: Unbound.
23 Stigler, J. & Stephenson, H. (1991) How Asian teachers polish each lesson to perfection, American Educator 15 (1), pp. 12-20, 43-47
24 Black, P. & Wiliam, D. (1998) Inside the Black Box: Raising Standards through Classroom Assessment. Phi Delta Kappan, 80 (2), pp. 139-148.

We had better not ignore the increasing insights from cognitive science, such as the work of Kurt Fischer[25] and Helen Abadzi[26] - which tells us that we need to recognise the limitations of a human brain structure which was determined on the savannahs of Africa, tens of thousands of years ago. We need to acknowledge that high level critical thinking is only possible when important knowledge and understanding has been committed to long-term memory. Memorisation is not the enemy of critical thinking and creativity, as some have suggested, it is the platform and scaffolding which is required to enable it to happen.

This reference back to accumulated research is fundamental to avoiding the cycle of planned failure. The principles for future learning prepared by the Confederation of School Trusts[27] and by Cambridge Assessment[28] do exactly that. Using these, we can build on, not ignore, the approaches in recent policy which have improved our international standing.

25 Fischer, K. W. (2008) Dynamic cycles of cognitive and brain development: Measuring growth in brian, mind, and education. In A.M. Battro, K.W. Fischer & P. Lena (Eds.), The educated brain (pp. 127-150). Cambridge: Cambridge University Press.
26 Abadzi, H. (2016) Training 21st-century workers: Facts, fiction and memory illusions. International Review of Education, 62, pp. 253-268.
27 Cruddas, L. & Rollett, S. (2021) A Bridge to the Future. Confederation of School Trusts. **https://cstuk.org.uk/assets/link_boxes/cst_policy_positions/ICE_10061_CST_A_Bridge_To_The_Future_Whitepaper.pdf**
28 Cambridge Assessment (2021) Outline principles for the future of education. Cambridge Assessment. **https://www.cambridgeassessment.org.uk/blogs/principles-for-the-future-of-education**