



POSSIBILITY THINKING: CREATIVE CONVERSATIONS ON THE FUTURE OF FE AND SKILLS

ABOUT FETL

The Further Education Trust for Leadership's vision is of a further education sector that is valued and respected for:

- Innovating constantly to meet the needs of learners, communities and employers;
- Preparing for the long term as well as delivering in the short term; and
- Sharing fresh ideas generously and informing practice with knowledge.

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HOW TO USE THIS BOOK

This book is the second major output of Possibility Thinking, which began as a collaborative project funded by the Further Education Trust for Leadership (FETL) and led by the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA). It has engaged leaders from across the further education and skills sector, enabling them to connect directly with thought leaders from think tanks, universities and related sectors.

The book includes a selection of the provocative, forward-looking essays published as part the first phase of the project and debated at three leadership summits in Glasgow, Manchester and London, as well as at a launch event at the RSA. It also features two new essays on subjects early readers felt were neglected in the original publication – the role of independent training providers and the role of governance – as well as responses from people within the sector to the ideas contained in all the essays. This book, crucially, aims to provide a critical space in which these ideas can be worked on in written conversation and taken forward within the FE and skills sector.

Each essay responds to an important 'what if' question. The authors were each asked to respond with deliberate optimism and purposeful creativity to a theme of current importance to the sector. While their writing is firmly rooted in the current economic and policy context, they have not been afraid to be challenging, original or idealistic in their thinking. Our hope is that practitioners will interpret the essays in that same spirit of informed, intelligent optimism and that they will contribute in a substantial and far-reaching way to the leadership of thinking in FE and skills. The responses are more informed by the day-to-day reality of life in the sector and are, equally, written with a deliberate commitment to optimism and constructive thinking about what is possible. They offer an indication of progress and achievements to date under each of the themes discussed and also give readers a sense of how some of the ideas and imaginings presented in the essays might be taken forward. They should not be read in a passive way but engaged with actively, critically and imaginatively. FETL and our colleagues at the RSA hope that the optimism of these papers will prove infectious and that they will provide, in Dame Ruth Silver's words, an incitement both to thought and to interactive, systemic action visible in our organisations and networks. Large-scale and ongoing reform and the emerging reality of the UK's withdrawal from the EU will pose huge challenges for a sector which has always proven itself adaptable and resilient in the face of change. That's part of our DNA. FETL believes that we must now demonstrate our capacity to be creative, innovative and forward-thinking in order to emerge from this period of turbulence confident, purposeful and on the front foot. Taking the ideas of this book to the wider FE and skills constituency, and providing space and opportunity to reflect on and engage with them, are what we – and this book – are all about.

FETL would like to thank all the contributors and the FE and skills leaders who took part in the three summits. We would particularly like to thank the RSA staff and fellows who have worked with FETL throughout the project and especially on its first major published output, *Possibility Thinking: Reimagining the Future of Further Education and Skills*.

February 2017

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Dame Ruth Silver is the founding President of FETL. She served as Principal of Lewisham College for 17 years until 2009 and became chair of the Learning and Skills Improvement Service in 2010. She is co-chair of the Skills Commission.

INTRODUCTION A SCRIPT FOR THE FUTURE

Dame Ruth Silver

President

Further Education Trust for Leadership

The Further Education Trust for Leadership emerged in a period of significant turbulence in the further education and skills sector. Now, as we review our progress to date and enter a new phase in our activities, the sector appears to have reached yet another existential turning point. A range of factors, including curriculum change, funding cuts, area-based reviews and the government's commitment to the creation of three million new apprenticeship starts by the end of the current parliament, present not only challenges but also opportunities, for those prepared to raise their heads from day-to-day preoccupations and think boldly and creatively about the future and what it might hold. It is to just such thinking that this publication, the second substantial fruit of a project which began as a collaboration between FETL and the RSA, and which has been enriched by the participation of leaders from across the further education and skills sector, incites its readers.

It is no accident that FETL's journey is sympathetically attuned to the evolution of the sector itself. Quite deliberately, we have allowed our agenda to be set by the informed concerns of others. We think of ourselves not so much as an organisation but as an 'organ of possibility', supporting people already active in the sector to think about the things that matter most to them. The Trust's vision emerged from the frequent observation from colleagues in the sector that, caught up in the frantic cycle of demanding change, accountability targets and near-constant reform, they simply had no time in which to think. This had special resonance for me. Lewisham College, where I served as principal for many years, was described by inspectors as a 'thinking college', a reflection of the brilliant work of colleagues, 10 of whom went on to become principals in their own right.

As I have written elsewhere, while the sector must understand where it has come from and where it is now, the very nature of our changing context means that we must be prepared to learn continuously and to look 'elsewhere and everywhere' in forging a future for ourselves.

This is what we at FETL mean to support, through our programmes of grants and fellowships, our professorial chair in further education and, perhaps most crucially in this new phase of our activity, our commissioning of new creative and collaborative space for thinking and learning. As much as our brains need new ideas and fresh insight for stimulation so those ideas need active, engaged minds to nourish and develop them. Ideas that are not worked grow frail or, worse, harden and break. The first collection of essays we published with the RSA under the banner of 'Possibility Thinking' drew together new farsighted thinking, mostly from outside further education and skills, addressing some of the key issues facing the sector (though it omitted the critical roles of independent training providers and governance and we have tried to put that right here, with original essays from Mark Dawe and Carole Stott). In this book we wanted to pick up some of the ideas of the essays and continue the conversation with the sector, encouraging people from our own world to think more widely about their work and weave their new thinking with their experience into a context for the future.

Our approach has been constructive. The people we have commissioned bring a thoughtful, informed perspective to the ideas set forth in the essays and, while their views are grounded in the reality of life in the UK FE and skills system, they have been true to the optimistic spirit of this project and have been prepared to be creative, open and imaginative in their responses. What we hope to see next is a continuing conversation, with colleagues across the sector taking forward the ideas and discussing them constructively within their own institutions. This is critical to FETL's remit and mission. We recognise that for new thinking to make a difference to how the sector is run and teaching and learning delivered, it is not enough to simply publish and promote it. We must also ensure that there are spaces in which the ideas can be taken further, made more relevant, challenged or developed in new and unanticipated ways. That, above all, is what we mean to do here, creating, among other things, a template for how new ideas and new thinking can be taken up and taken into the sector's organisations.

Just as we refuse to be passive in our dissemination of new ideas, we very much hope that people in the sector will engage in an active, intelligent way with this book. We want to see people interact with the ideas, taking them further within their own organisations, in order to arrive, on behalf of us all, at a script for the future. We all engage with ideas, whether through books or films, or through an article in the TES or FE Week. But simply to shrug and put that idea away, barely explored, is a waste of life's energy. Only by engaging further, in the same spirit of informed optimism, bringing our own knowledge and experience to bear on those ideas and weaving these strands together to create something new and different, can we hope to work up scripts for the future of the sector. Given the current wave of reform and the new pressures created by devolution, the onus on the sector to write its own script is greater than ever. To my mind, this is absolutely essential if the sector is to flourish in the post-Brexit, post-area review world. Devolution may not be the solution to all of life's problems, but it is certain to introduce new players and interests to the system. If we are not to be squeezed between national policy making and the interests of these new local players, we must be clear, collaborative and self-confident in our response.

As I have written before, the sector must be cognisant of what has gone before, particularly in a sector in which policy memory is notoriously short. But, more than anything else, it must also be loyal to the future; bold, creative and unapologetic in claiming its place in this emerging territory. That goes to the heart of FETL's mission: to look beyond today's difficulties to new, possible tomorrows. If we don't tell people in positions of authority what we are about and what we can offer, we can't expect them to appreciate or understand us. And if we fail to take responsibility for what we imagine should be the sector's place in the world, it is more than likely that someone else will put us where they think we belong.

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Philippa Cordingley is Chief Executive of the Centre for the Use of Research and Evidence in Education (CUREE) and is an internationally acknowledged expert in using evidence to develop education policy and practice.

Paul Crisp is Managing Director of CUREE and its Chief Information Officer. He is Teaching and Leadership Advisor (for the West Midlands) and a National Leader of Governance for the National College of Teaching and Leadership. What if the further education and skills sector became a genuinely self-improving system with the trust and capacity to determine its own future?

Philippa Cordingley and Paul Crisp

Introduction

The further education and skills (FES) sector in England continues to prove itself flexible and adaptive to the many and changing demands made of it. Its position at the overlap between formal schooling, vocational education, plus, in some cases, higher level academic study, has left it exposed to competing models of quality assurance and, in turn, attenuated models of quality improvement. This paper explores and imagines three 'what if' responses to quality improvement which together could create a strong platform for establishing FE as a more widely recognised self-improving system. Building self-improvement inevitably requires clarity about where improvements are needed and can make most difference.

The internal impact of external shininess

The FE and skills sector's niche in the education ecosystem has providers attempting to reconcile the very different expectations of employers (effectively commercial service purchasers), public sector regulators/funders and students. To satisfy the quality requirements of the former, providers adopted procedural compliance style QA systems of the ISO 9000¹ variety which accredit self-evaluation based

¹ ISO. 2009, 2011, 2015. ISO 9000 – Quality Management. http://www.iso.org/iso/ home/standards/management-standards/iso_9000.htm

on detailed, documented adherence to process. The current system regulators, however, place little value on this and prefer to rely on a model of periodic external inspection by 'experts' (i.e. Ofsted). Both approaches factor in learner outcomes even though these are too complex to make sense of in aggregate; the form in which they are assessed/measured for accountability purposes. A significant number of FES providers vehemently dispute the relevance of the Ofsted approach and the expertise of its inspectors; a challenge which has become more strident as the different flavours of the inspection framework have converged on the school-focused variant.²

It was suggested that if FEIs could match the private sector in terms of quality, flexibility and price, whilst also offering accreditation, then there was some confidence that this would bring substantial benefits to the sector. However, colleges would need to be much more visible and would need to reconfigure their services so that they could be more flexible in terms of delivery.

College and other providers feel strongly that they operate in a hotly contested competitive environment and have evolved polished professional marketing strategies to deal with it. The purpose of the marketing message is to communicate a story of success and any public admission of a flaw is seen as a sign of weakness competitors will exploit. Naturally, compliance is policed and more open exploration is discouraged. For example, a particular research and development project involving a dozen colleges led by 157 Group, RSA and CUREE included a mid-point seminar bringing together the local co-ordinators to review and share progress for some formative feedback. Despite the restricted audience and formative purpose, many of the local co-ordinators had to get senior management approval for the specific terms in which they reported their project to their peers.

² For instance, this commentary in *FE Week*: Hatton, P. 2016. Chief Inspector should look closer to home for poor performance, *FE Week*, 25 January. http:// feweek.co.uk/2016/01/25/chief-inspector-should-look-closer-to-home-for-poorperformance/

Understandable as this approach may be, it has a substantial downside. This glossy marketing disposition becomes more than just a public stance; it affects the internal dynamic of the sector, engendering a widespread difficulty in acknowledging and exploring challenges and areas for improvement. It ceases to be safe for providers and most of the practitioners within them to recognise and probe weakness. This wounds the sector; a system which is unable to disclose and discuss problems is unable to address them. A self-improving system has to recognise that there is something to improve and take the opportunity to understand it in depth. Similarly, practitioners have to be able critically to review their personal and collective teaching, learning and assessment efforts to identify areas for development and to propose or seek advice on how they can be improved. To do that, they need to work in a system that values such review and analysis.

What if the sector replaced its marketing glossiness with a more confident and assertive openness about its weaknesses and what it's doing to address them? What if it seized these as opportunities to deepen practice and strengthen the system publicly? Making public the acknowledgment and exploration of weaknesses has many virtues. Inviting in external critique smacks of confidence and makes it easier to hear and act on challenges. Testing and disturbing the status quo by welcoming the reviews of outsiders helps us all to move forward. Greater openness also, perhaps paradoxically, helps us earn and secure the trust of the wider community. It is the refusal to stagnate or be seen as complacent, not a set of polished results, that helps exceptional providers and, indeed, whole sectors to be seen as sufficiently self-improving to escape from or move beyond inspectorial models of quality assurance and improvement.

The leadership of learning

Even though most FE providers (and many other training organisations) have become, in effect, not-for-profit businesses, they would, if challenged, assert that their business continues to be the provision of education/training opportunities (and/or the enhancement of their learners' life chances). But there are tensions that pull in opposite directions. Over the 25 years that the sector has existed in roughly its current form, the number of providers has reduced; mostly though merger and consolidation. Providers, particularly colleges, are larger and are in practice conglomerates with diverse and heterogeneous portfolios. At the same time, the top executive team has tended to reduce in number, to become more professionally focused on the business dimensions of the enterprise and to become increasingly remote from the teaching, learning and assessment activities which are the heart of the business.

Meanwhile, in the divisions/faculties/departments of the organisation, teachers/trainers are grappling with the twin demands of being good teachers and of being current and knowledgeable about their subject/vocation. These two strands are equally important (as noted in, for instance, the Commission on Adult Vocational Teaching and Learning [CAVTL] report, *It's about work*...) but have become separated in many providers. We found, for instance in our pilot study conducted with the 157 Group,³ that:

... vocational and pedagogic domains are rarely brought effectively together in college CPDL support. Vocationally related CPDL seems to be held in higher regard by many practitioners and its delivery is often embedded in local (i.e. faculty) systems. Teaching and learning development, by contrast, is often a 'corporate' initiative, centrally delivered. Too many of the participants (and, it has to be said, some of their leaders) are willing to settle for a directive approach focused on behaviours which staff experience as 'tips and tricks' superficiality.

What if leadership at every level in the sector was intently focused on enhancing quality and depth in vocational learning and achievement? The first thing they would reach for is more and better evidence

³ Crisp, P. and Gannon, A. 2012. *Raising standards of teaching and learning through effective professional development*. Coventry: CUREE and London: 157 Group. http://www.157group.co.uk/sites/default/files/documents/skeinfeoverviewpublic.pdf

about what makes a difference. Right now, leaders, practitioners and everyone in between suffer from a lack of evidence about effective teaching and learning practice in the sector. The formal published research on further education is slight (certainly in comparison to the school and higher education systems) and has tended to focus on the problem rather than the solution; on the labour market economics interests of government departments. The expanding body of more substantial and in-depth evidence about developing quality in teaching and learning exists in the higher education and school sectors and the appetite for using it is growing exponentially with support from social media. The promise of an extension to its remit in the March 2016 education white paper notwithstanding, there is as yet no Education Endowment Foundation⁴ for further education.

The sector has proved itself adept in its use of quantitative data for driving performance review. A change of leadership focus might enable it to extend this important set of skills and systems into developing and applying much deeper understanding to build consistency and coherence around high-quality teaching, learning, curricula and assessment. Such a self-improving system would have leaders knowledgeable about these four pillars of quality in their organisation and engaging with and modelling professional learning as a driver for quality improvement at every level.⁵ Those staff would have the resources and the skills to collect and analyse evidence of different kinds about the interactions between their own practices and their learners' success and the opportunity to use that evidence formatively (rather than judgementally in high-stakes evaluations). They and their leaders would have easy access to good quality, relevant research on effective teaching and learning strategies presented via useful tools and resources (some of which would be sourced via a post-16 Education Endowment Foundation). Above all, professional

⁴ See the Education Endowment Foundation website: https:// educationendowmentfoundation.org.uk/

⁵ The importance of which was highlighted by Viviane Robinson and colleagues in their systematic review, summarised here: Robinson, V., Hohepa, M. and Lloyd, C. 2009. School leadership and student outcomes: Summary of the Best Evidence Synthesis. CUREE Research Summary. http://www.curee-paccts.com/files/ publication/1260453707/Robinson%20Summary%20Extended%20Version.pdf

development and learning would mobilise deep content expertise, contextualised with specific teaching and learning approaches and insights for the needs of employers, learners and the development of a vibrant and ever-improving workforce.

Assertiveness not victimhood – learning from others

It is a common characteristic of educators in every sector to think of their situation as unique. It is also clear that the financial pressures on the further education and skills sector leave those in other sectors. paling into insignificance. It is similarly true that the stakeholders are more complex and diverse than those for other sectors. But if the sector wants to gain control of its destiny through self-sustaining improvement, it would be foolish to ignore how others are addressing this. A key element of effective system leadership is the capacity rapidly to spot the similarities between core business developments (i.e. teaching and learning) in a wide variety of contexts. The Activate Learning Group in Oxfordshire, for instance, used its network with employers, schools and public authorities to promote a shared vision based on a consistent and coherent model of teaching and learning.⁶ Schools in England have been collaborating in 'teaching schools alliances' to co-ordinate an offer of school-to-school support, leadership and practitioner development (including formal middle and senior leadership qualifications) and teacher training. The next stage of development, happening now, is the creation of regionally (and subregionally) collaborating networks of teaching schools. This, in turn, was an application to education of the teaching hospital concept in health provision which was designed to integrate the generation of research knowledge about health care interventions with the application of that knowledge to higher vocational skills and practice, an approach which would transfer quite sympathetically to the FE context.

⁶ Cordingley, P., Crisp, P., Bell, M. and Crisp, B. 2013. *Leading Local Education and Training Report*. RSA, CUREE, Education and Training Foundation. http://www.curee-paccts.com/files/publication/[site-timestamp]/Local-leadership-of-education-%20final-report-release.pdf

The oft-acclaimed responsiveness of FE and skills sector providers is a double-edged sword with too many in the system sounding and sometimes behaving like victims. Behind the attempted projection of a polished vision of the sector is a brittleness and lack of confidence further reinforced by the difficulty providers have in working in genuine collaboration. Schools, let us be clear, are frequently also in competition but they seem to be able to find some places to work together. Commercial organisations also shift between competition and collaboration - with trade associations often acting as the brokers. Higher education institutions have contrived to act in concert both at a policy level and in a variety of very practical ways of which the shared digital services provided via JISC⁷ are obvious examples. Many teaching school alliances have as 'strategic partners' other schools, private and third-sector providers and HEIs. For the FE and skills sector to be, and to be acknowledged as, a self-improving system, it needs to create the mechanisms for local, regional and national collaboration around an improvement agenda.

What if the sector took the initiative to acknowledge that improvement is necessary and continuous? It would embed in its culture and structures an expectation that its leaders are leaders of learning who model and facilitate an engagement with evidence, including from formal research – and the application of that evidence via collaborative regional and national structures. Sector leadership would benefit from learning the lessons from some of the more rigorous research on the impact of leadership⁸ which showed that 'promoting and participating in teacher learning and development' had twice the impact (effect size) as the next most effective activity – 'planning, coordinating and evaluating teaching and the curriculum'.

FE's fortunes have waxed and waned over the decades and the sector's perceived lack of political salience (compared with, say, schools or universities) can encourage a feeling of being the poor cousins. But fortunes change, and the sector will, in due course, be recognised again as the most efficient means of generating the quantity of skilled

⁷ See the JISC website: https://www.jisc.ac.uk/

⁸ Notably the systematic review by Viviane Robinson et al (2009), op. cit.

people the country needs – but is currently apparently unwilling to pay for. Self-help and self-regulation were proffered by one government but then snatched away by a different one now nearly a decade ago. But what was then an innovation is now the zeitgeist. The sector and its leaders need to dig in for the long haul and begin investing now in developing for themselves the culture, the systems and the institutions that will underpin a sustainable self-improving system.

Response

David Hughes

I have yet to meet a college principal, chair, board member or member of staff who doesn't want to improve the quality of the learning they offer. I have yet to meet anybody in further education who doesn't recognise that the primary responsibility for continuous improvement lies with the college, led by the senior leadership team and shared by everyone in the college.

With that starting point, I read 'What if the further education and skills sector became a genuinely self-improving system?' with some confusion. Confusion because, in many ways, the sector I have worked in for 20 years already has many of the attributes of a self-improving system. What I have seen is a sector which has adapted, improved markedly on any measure of quality, focused efforts on learner outcomes and meeting employer needs, and been open to debate about how to get even better.

Of course, it has a range of organisations in terms of quality – what sector hasn't? Of course, it can 'do better' – point me to a sector where that is not true. Of course, we can learn from other sectors and we need more sharing, evidence, evaluation, research and development of our people – that's why organisations like the Association of Colleges offer leadership development, support for governors and training, consultancy, support and research to and for colleges. Overall, though, I don't recognise the rather bleak picture the authors have painted – it is not as bad as that. Nevertheless, I want to focus on how we can make it even better. Appreciation of the need for continuous self-improvement is probably the first and fundamental condition for such a system to be successful and I believe that condition is already met. But appreciation is not enough. There are four other conditions which need to be satisfied if we are to achieve the vision the authors have described and to which all of us in further education probably aspire. Some of these are within the gift of leaders in the sector; others will require some support, recognition and changes from others.

The second of the five conditions is clarity of purpose and a vision for what role further education should play in our society and for our people, communities and economy. On this there are some good changes afoot which secure the place of colleges as anchor organisations in every community, essential for supporting young people's transition to work, able to deliver for young people and adults across the breadth of academic and technical/professional learning and skills which our economy will need. The area reviews fundamentally recognise how essential colleges are and the inevitable shift in appreciation of the skills agenda that will emerge from Brexit should provide a platform for even greater recognition.

More confidence and assertiveness about our purpose and vision will help, but we also need to set out new ways to measure, assess and evaluate the contributions colleges make. The current metrics and focus of inspection need to adapt to the changing role and allow for a more measured assessment of quality.

The third condition requires government to stop making so many policy, funding and regulation changes. Stability in policy, more secure funding and simple regulation will help colleges make informed investment decisions about how they change, improve and develop. Without stability, it is hard to lead confidently a change process and even harder to make long-term investment decisions in people, culture, resources and capital. Anybody who has led a change process will know that it takes several years and a very clear vision to be able to shift cultures and behaviours. With a clear purpose and more stability, we then need leaders across the sector to step up to the mark – this is the fourth condition. If the space is provided for change and self-improvement, we will need to support leaders to seize the opportunities. AoC's leadership and governance work is a good example of the college sector investing in itself, but more resource will be needed to make this even more effective. I am confident that we have the leaders, at all levels, who will flourish in a more stable environment – we just need to give them the support they need to learn, act, reflect and adapt to the challenges they will face.

The fifth and final condition is for more understanding of what works. The authors rightly point to the great work that the Education Endowment Foundation is doing in the pre-16 arena. I am delighted to be supporting their move into the post-16 space with their new investment in English and maths GCSEs for 16–19 year olds. This will properly investigate what works in helping young people achieve and allow practitioners in the sector to apply those lessons in their own settings. We need more of this type of research and evaluation though in what is a very under-researched world.

So, five conditions which we all need to focus on to reach a truly selfimproving sector, confident about decisions on investment and change. My optimistic head says we just may be on the cusp of meeting these conditions. My heart says that we need to because the role of further education and colleges is probably more important now than ever before.

David Hughes became Chief Executive of the Association of Colleges in September 2016. He was Chief Executive of the Learning and Work Institute (previously the National Institute of Adult Continuing Education) from 2011 to 2016. He previously worked for the Learning and Skills Council and Skills Funding Agency where he led funding relationships with providers.

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Mark Dawe is Chief Executive of the Association of Employment and Learning Providers. He was previously Chief Executive of OCR, the exam board, and Principal of Oaklands FE College. What if we had the more integrated, inclusive and responsive employment and skills provision needed in post-Brexit Britain?

Mark Dawe

My background as a civil servant, college principal, leader of a national awarding organisation and now chief of the trade body that represents work-based learning providers means that I have followed the debates around changes to post-16 education from almost every perspective. In my previous role, I witnessed the relentless focus on GCSEs and A-levels, school performance tables and the struggle to identify what it is we really should be focusing on to ensure our young people are best equipped for the future world of work and society.

In recent years, I have seen a narrowing view gaining popularity, i.e. if it can't be assessed externally by exam, then it can't be trusted and isn't a proper assessment. This has a significant impact on academic qualifications, is restricting classroom-based vocational qualifications and seems to be embedded in the latest government guidance for apprenticeship learning – namely assessing skills and competency by asking a few questions at the end of a programme. I got tired of hearing the experts criticising exams and learning for not including skills for the workplace, ignoring the fact that there was a whole range of technical and professional programmes and assessment that did just that. For me, this is the excitement of the current government policy for apprenticeships, though, at the same time, I worry about the recently published *Post-16 Skills Plan*.⁹ The surge in interest in the areas of mental toughness, grit and resilience, or whatever the current favoured term happens to be, is fantastic. For me, it is the missing

⁹ Department for Business, Innovation and Skills; Department for Education. 2016. *Post-16 Skills Plan*. https://www.gov.uk/government/publications/post-16-skillsplan-and-independent-report-on-technical-education

ingredient and there is some excellent work in this area. Many argue that these qualities can't and shouldn't be assessed, but I have seen some really interesting work on identifying and assessing mental toughness¹⁰ and, helping in a small way with our local Scouts, I see an organisation that has been handing out assessments for this sort of activity (they call them badges) for decades.

While it is hard to avoid the accusations of vested interest, or belonging to the 'blob', when working in education, if we focus on learners' interests and those of employers we shouldn't go far wrong. Most individuals strive to be economically active and to earn a good wage. Therefore, employers deserve a significant place in the design of education, training and assessment, but not to dominate it. Governments are elected; again, they have a right to influence and steer, but personal experience and views should not dominate what should be evidence-based policy - and that, of course, does not mean looking for evidence to support an opinion. I often say that the plural of anecdote is not evidence. It is important to listen to the views and experiences of individuals, but let's not draw conclusions based on a few experiences. We all also strive for highquality education and training accessible to all. For many of us there has never been a forgotten 50 per cent; we have tried to do the right thing for every individual. But policy and funding have regularly been the obstruction, often unintentionally, and it is those that have designed these systems that forget the 50 per cent.

Towards parity of opportunity

At last, we may have the ingredients for a system that gives all young people parity of opportunity – a phrase that is far more appropriate than parity of esteem. We want all young people to have access to as many opportunities as possible through as many routes. In my view, this is at the core of any skills strategy – not a focus on a narrow number of occupations.

¹⁰ For example, Strycharczyk, D. and Bosworth, C. 2016. Developing Employability and Enterprise: Coaching Strategies for Success in the Workplace. London: Kogan Page.

We want a simple all-inclusive skills strategy. And it should be simple if some core principles are maintained. If you want a brief reminder of the current complexity, read the Skills Commission's *Guide to the Skills System*.¹¹

Let's look at everyone aged 16 and over. A disgraceful number of 16 year olds emerge from school without good literacy and numeracy. We should assume this is not going to change for a while. But, equally, when it is failing after 11 years of compulsory schooling, let's not keep hitting the learners over the head with the same approach. Anyone who understands employers' needs and skills will always place the individual's literacy and numeracy at the top of the list. So let's be clear – post-16 functional skills, at least to Level 2 (and higher if the industry requires it), should be core to any skills programme. Young people aged between 16 and 18 should keep going to whatever level they can reach during the two years.

If we have a clear understanding of the current needs of our nation at all levels of skills across the many sectors of industry, and the future needs of industry due to growth in demand or the retiring workforce, we have a good starting point. We have an analysis of our population and where their skills fit in terms of that need. What is vital is that there are clear pathways of progression from the lowest levels of skills need, with no impossible ravines to get across en route. As a college principal, I refused to have any offer within a sector that didn't give our learners a clear pathway from Entry level to Level 3 and beyond. I couldn't accept tutors telling me that a student had passed Level 2 but they were not ready for Level 3 or there wasn't a Level 3 for them to move to, leaving the student with nowhere to go.

Leitch – a wasted opportunity

This is hardly revolutionary thinking. Ten years ago, Lord Sandy Leitch was asked by Gordon Brown 'to identify the UK's optimal skills mix for

¹¹ Skills Commission. 2015. Guide to the Skills System. http://www. policyconnect.org.uk/sc/sites/site_sc/files/report/419/fieldreportdownload/ guidetotheskillssystem.pdf

2020 to maximise economic growth, productivity and social justice, set out the balance of responsibility for achieving that skills profile and consider the policy framework required to support it'.¹² The review advocated a more demand-led skills system that was responsive to the needs of employers and learners, and it set out a very reasonable timetable for achieving it. Unfortunately, the recommendations were too radical for some and many saw their implementation delayed or were kicked into the long grass altogether. It is not unreasonable to ask if we could have avoided much of what we are experiencing now, such as area-based reviews, if we had been more willing to take on Leitch's challenges at the time.

It was already apparent then, for example, that apprenticeships were going to be a significant part of the further education and skills landscape. David Hunt, now Lord Hunt of Wirral, had brought them back in their 'modern' format in 1994 and numbers then grew steadily under the Blair and Brown administrations before the former skills minister John Hayes gave them a major push again when the coalition government was formed.

In the context of the current reforms of apprenticeships, inspired by the Richard review, debate has understandably focused on volume, quality, higher-level provision and sometimes, completely irrationally in Britain's service-led economy, on whether apprenticeships should just be the preserve of the manufacturing or STEM sectors. We also hear criticisms of poor-quality service sector apprenticeships. This just isn't true – they are not poor quality. They are often Level 2 (GCSE-equivalent) with excellent quality. The critics are generally advocating that all apprenticeships should be at a high level and in traditional industries. This is just wrong – the world has moved on and so should they (or out of the way).

¹² Leitch, Lord S. 2006. *Leitch Review of Skills: Prosperity for all in the global economy* – *world class skills*. London: Stationery Office. https://www.gov.uk/government/ uploads/system/uploads/attachment_data/file/354161/Prosperity_for_all_in_the_ global_economy_-_summary.pdf

No-one could reasonably deny that the apprenticeship programme has played a significant role in advancing Sandy Leitch's demand-led vision. The funding system for independent training providers, which are responsible for 76 per cent of apprenticeship delivery in England,¹³ is based on actual delivery, and contract growth with the Skills Funding Agency (SFA) depends on these providers showing evidenced demand from their employer customers that more apprenticeships are needed. Ironically, it is the government's funding allocation system, not employer demand or providers' ability to deliver, that has constrained apprenticeship growth.

This is why members of the Association of Employment and Learning Providers (AELP) became very frustrated when they heard supporters of the Richard review recommendations claim that too few employers were engaged in the programme. Some 2.7 million apprenticeships were created in the last parliament and this is a testament to one of the strengths of our sector in that many training providers and colleges have picked up the baton in respect of employer responsiveness.

Responding to the social mobility agenda

Our sector has shown its strength in responding to the social justice agenda which has now been rechristened, by Theresa May, the social mobility agenda. Most schools in England are good or outstanding but this is a relatively recent development. The large majority of independent training providers (ITPs) and colleges are also good or outstanding. Too many 16 year olds have been leaving school with few or no GCSEs and it has often been colleges and providers who have picked up the pieces. Official government data in September 2016 showed that the UK still has 621,000 16 to 24 year olds unemployed despite an overall record employment rate. This figure is far too high.¹⁴

¹³ Skills Funding Agency data, 2014-15. See: http://www.aelp.org.uk/news/ pressReleases/details/three-quarters-of-apprenticeships-are-delivered-by/

¹⁴ UK labour market data, 2016: http://www.ons.gov.uk/ employmentandlabourmarket/peopleinwork/employmentandemployeetypes/ bulletins/uklabourmarket/latest

It is not easy to champion a demand-led skills strategy when a severe recession has just taken place and the economic recovery remains fragile. Logic suggests that if demand for skills is large, then there should be enough 'customers' in the form of employers and learners who are prepared to pay for or contribute financially to the cost of learning. This is why employer cash contribution proposals were part of the Richard review and why the coalition government introduced Advanced Learner Loans for learners aged over 24. However, economic uncertainty has meant that the proposed cash contribution requirement for non-levy paying employers under the apprenticeship reforms has been reduced to £1 in return for £9 from the state while loans for apprenticeships were swiftly dropped after demand from adults plummeted. The introduction of the levy itself (by a Conservative government, remember) is an indication that the history of funding skills training in the UK has a complexity which makes imposing supposedly simple solutions harder than imagined. Like it or not, therefore, a skills strategy which embraces improved business productivity and social mobility requires a partnership between government, employers, providers and willing learners.

The apprenticeship policy really does have the potential to be a game changer. Why didn't we just have an apprenticeship tax and redistribute through a central funding mechanism? As neat as this might have been, and there are many merits to this approach, the levy has got large corporates talking about apprenticeships. Boardrooms are discussing for the first time whether and how they might embrace the apprenticeship agenda and how they might recruit in new ways. The national press is running apprenticeship stories and Newsnight is debating apprenticeships. Taking into account the debate around university fees and the challenges of student dissatisfaction with teaching and progression into graduate jobs, it seems likely that the higher levels of learning delivery will be be turned on their heads. However, caution is required. Once again, higher education is in danger of taking over a policy that was in part meant to serve all individuals at all levels and to work for all companies, whether from the FTSE 100 or a local small or medium-sized enterprise.

Apprenticeships are a government-funded programme. Absolutely, they should have employer input into the knowledge, skills, behaviours required – but this isn't training for a specific job; it is a broader training and education to enable progression and movement in a sector. The needs of the individual and the portability of their skills must be addressed, as well as the current needs of a group of employers. The government's role as funder gives it the right to require individuals' wider core skills to be supported rather than purely specific job skills. Broader, non-specific training and education is delivered in the classroom, fully funded by the state. Specific employer training should be funded by the employer. Combine the two and we have an apprenticeship programme where the state is funding the learning and the employer is supporting the employee in their workplace.

Our belief, which was reflected in AELP's 2015 pre-general election manifesto,¹⁵ has always been to maximise the value of the investment which is available. A more responsive SFA funding system rewarding the most responsive providers has long been a key item on the AELP wish list. The National Audit Office found¹⁶ that government spending on apprenticeships has produced a good return on investment – enough to convince the Treasury and others that apprenticeships should retain their place as the UK's flagship skills programme – and where evidenced demand from employers for more apprenticeships can be shown, it should be supported.

No need to wait on government to know what is needed

As the AELP manifesto with its 10 key points for action shows, independent providers and our like-minded college members have a very clear vision of how the FE and skills sector should behave in supporting economic growth and social inclusion and their role in achieving those goals. We have always been very strong at articulating what is required rather than waiting for governments to tell us what

¹⁵ AELP. 2014. Manifesto for Driving an Economic Recovery. http://www.aelp.org.uk/ news/submissions/details/aelp-policy-publication-manifesto-for-driving-an-e/

¹⁶ NAO. 2012. Adult Apprenticeships. https://www.nao.org.uk/report/adultapprenticeships/

they expect from us. A very good example is the creation of the traineeships programme where we showed ministers in the early days of the coalition government in 2010 that stepping-stone provision was required to support young people with few or no qualifications into an apprenticeship or sustainable employment. Ministers responded positively to our blueprint and we now have a growing programme with nearly 20,000 starts in 2014-15 and an expected larger number for 2015-16.

In looking forward more strategically, the government has accepted the vision of technical and professional education (TPE) for 16 to 18 year olds set out in the Sainsbury review.¹⁷ There were very sound reasons for commissioning the review. It potentially offers clear routes through to work or progression with pathways in the different sectors and linkage between classroom-based and work-based routes. But are we really talking about 15 routes of learning or whatever the current term is? Applied or vocational A-levels, GNVQs, diplomas, Sainsbury – how many times do we have to go around this loop, investing millions only to throw it all away again?

On the basis of the figures provided, it appears that 57 per cent of jobs in our economy are outside the recommendations' scope, so we are in danger of creating an elitist system that would ignore many young people requiring a Level 2 or Level 3. Employers, too, in the unfavoured sectors will not be happy at the prospect. This also misses the fundamental point that individuals, when undertaking any training, have their eyes opened to future opportunities and new career pathways. To ignore this is ignoring that 50 per cent once again.

The Brexit factor

The government's *Skills Plan* was drawn up before Britain took the decision to leave the European Union and any vision for future skills

¹⁷ Department for Education; Department for Business, Innovation and Skills. 2016. *Report of the Independent Panel on Technical Education*. https://www.gov.uk/ government/uploads/system/uploads/attachment_data/file/536046/Report_of_ the_Independent_Panel_on_Technical_Education.pdf

provision has to take this into account. The government is under intense pressure to reduce net migration significantly and the ending of free movement of labour is a likely result. Downing Street is signalling that the introduction of work permits may be the way forward and no doubt many business sectors will lobby that their allocation of permits should be generous. But while the granting and re-granting of temporary permits may hide the true picture, there is no escaping that the net figure will have to come down. We therefore have to develop the skills of more of our homegrown talent to fill the resulting vacancies.

AELP made this point in its response¹⁸ to the August 2016 government consultations on apprenticeship reforms, but the argument does not only apply to increasing the number of apprenticeships. Investment in basic skills, for example, is equally important and this relates to what should be the key role for the FE and skills sector over the next five years in responding to the new economic and social challenges.

More integration of skills and employability provision

Working with central and local government, including the devolved city regions, the sector should be leading the way in forging closer links between skills and employability programmes. Since there was a Whitehall departmental split of responsibilities for these programmes in 2001, the lack of join-up between the two sets of programmes has been damaging to the economy and especially to the unemployed people who need to train to secure sustainable employment.

Skills are key to sustainable employment and yet it has often been a hard message to impress upon the merry-go-round of ministers who do not stay in the skills and employment posts for very long. We have just seen the skills portfolio return to the Department for Education but we cannot expect the employment portfolio to return there too. So we need the departments and agencies to generate more

¹⁸ AELP response to DfE consultations on apprenticeship reforms: http://www.aelp. org.uk/news/submissions/details/submission-29/

integrated contracting processes, success measures and provider payment methodologies that incentivise more integrated provision.

The ingredients are all there. The need is clear and has actually become more urgent and more important. A skills plan must embrace lower-level skills and employability as well as the pathways through to professional expertise. There are sections of society that need more help than others to step on to the skills ladder. Employers can help define the needs; education and training experts can translate these into programmes of training and learning; assessment experts can ensure the right assessment is applied to demonstrate success; and inspectors can ensure that quality delivery is defined and achieved. So what is the government's role? The government needs to determine how important this agenda is. It needs to decide what state resource is needed and how to allocate it. Sixteen to eighteen year olds have a budget allocated; there is £2.5bn of levy funding and £1bn of adult funding - this seems a lot, but maybe the government needs to be more transparent and demonstrate how much of this ambition can or can't be supported with the budget currently available. If governments are genuinely committed to social mobility, they should be clear what support they are giving to those that need it and make the support available to any provider supporting the individual.

So where is the big idea, once we have sorted out the skills strategy? It's simple really. The final step is to genuinely free up the provider market. We need state minimum provider quality requirements and capacity requirements post-16. But then if a student chooses a particular provider or an employer who wants to work with a provider, then we should allow that freedom of choice. The final push to a fully demand-led system and the removal of grant funding will take us there.

Response

Mike Smith

Mark Dawe makes a number of very strong and interesting points in his essay but one thing stands out for me: his use of the term 'parity of opportunity' in preference to the now, frankly, rather hackneyed 'parity of esteem'. This, it seems to me, captures nicely what it is our young people desperately need, particularly those young people Mark aptly identifies as the 'forgotten 50 per cent'. It is important that young people recognise and have access to as wide a range of opportunities as possible, whether they are thought of as vocational learning or higher education. They must be able to see both the opportunity and the pathway beyond it, whether that leads to further education and training or to a job. The opportunities for those who take the vocational route are impressive – and often come without the burden of a huge debt shouldered long into adulthood – and there are many providers, mine included, which are prepared and able to support them in achieving their ambitions, from work-based learning through apprenticeships to higher education and into employment.

Less positively, while the opportunities undoubtedly exist, the sector has not always been good at promoting them, while the school system, incentivised to persuade pupils to stay on and do A-levels, regardless of other options, has tended to send out unhelpful messages about the value and availability of vocational pathways. This remains a major obstacle to true parity of opportunity and the full realisation of the sector's contribution to UK productivity and growth. Another is the lack of corporate memory in the sector, a result, largely, of the astonishing level of churn in ministerial teams responsible for further education and skills. A 2014 study by City and Guilds found there had been 61 secretaries of state responsible for skills and employment policy in the past three decades. Little wonder we suffer from collective amnesia about what works and what doesn't. This systemic issue is compounded by the increasing level of churn among civil servants, who, historically, have provided at least some degree of continuity in skills policy. It is one reason why we continue to talk about Leitch and other reports and to lament our failure to learn the lessons of other governmentcommissioned studies. The move to the Department for Education is unlikely to help matters and must raise concerns as to the skills and capacity of the department to manage the skills dimension adequately. There is a danger that the department will see further education merely as an extension of secondary into tertiary education and that our voice will be further marginalised.

Another reason for the seemingly circular nature of policy debate about skills is the ongoing distorting influence of factors outside the further education system, chief among them our failing secondary school system. It may be very clear what needs to change to deliver 'parity of opportunity' - as report after report has made clear - but the long tail of under-achievement at school continues to hold us back. The problem is that much of the work further education now does is *rework*, correcting the failures of secondary education. A system that still, on average, fails 50 per cent of the students who pass through it is unacceptable. It is unacceptable from a social mobility perspective and it is unacceptable from an individual point of view. It is also unacceptable from a cost point of view. We waste billions of pounds providing what schools should already have provided, particularly in colleges but also in work-based learning providers. That is the missing element in all of this. It's almost as if we have decided to consign this to the 'too hard to do' box and let tertiary education sort it out. That has to be put right. I don't know of any other country that would tolerate such a waste of talent and potential, or think that they could afford it.

In other respects, though, I think Mark is right to say that the basic ingredients are all there. The big issue for the private sector is one of capacity and capability. While colleges have a great deal of capacity and capability, but limited employer engagement, a lot of private and third-sector providers have relatively limited capacity and capability, but do lots of employer engagement. That is where the area-based review process fails, in my view, as it tackles only one side of that issue. It is focused entirely on reducing cost and creating bigger, more efficient institutions. I don't think that speaks at all to how you become more engaged with employers. We need to move away from this obsession with institutions, and think instead about how the further education estate as a whole can help deliver the skills agenda. A big FE campus has facilities which independent training providers simply cannot afford to recreate. These represent major public assets. They could be accessed by the different players, whether independent training providers, local authorities or third sector providers, which would free up the potential of billions of pounds worth of assets that aren't being effectively used and help localities better meet the needs of learners and employers. The

area reviews are missing an important opportunity to explore how those assets can be more efficiently used. I would like to see FE and skills, and the education sector as a whole, working far more collaboratively.

Finally, I broadly support the aspiration to 'genuinely free up the provider market' and make a 'final push to a fully demand-led system'. I believe in a free market but it has to be tempered. Some unhelpful behaviour has started to emerge around the apprenticeship levy, with some employers gaming the system and asking providers to bid to access their levy. The levy creates huge opportunities, and it has got employers thinking hard about apprenticeships, but it must be better policed. I also think the free market is failing in the development of new standards. It cannot be a matter of a few employers coming up with standards that meet their needs alone, thus making qualifications difficult or impossible to transfer from one sector to another. There is a tension between national need, learner need and employer need when it comes to skills, and there has to be some way of managing that tension so provision does not become unfairly skewed towards one corner of this triangular relationship. There is a role, therefore, for government in creating a regulatory framework and monitoring to make sure the market works in an acceptable way while at the same time freeing it up to innovate and take risks. It is that innovation in the market that not only drives up numbers but drives up quality too.

Mike Smith OBE is Chief Executive of Gen2. He has over 25 years of experience working both with and in the further education and skills sector. Prior to working for Gen2, he worked for 20 years in the nuclear industry in a variety of senior roles. A chartered engineer by profession, he has experience in the design and delivery of high-quality training and educational programmes to support the engineering, nuclear and advanced manufacturing sectors.

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Pauline Tambling CBE is CEO of Creative and Cultural Skills. Previously she worked in several senior roles at Arts Council England, where she set up the £130m Creative Partnerships programme to connect schools with creative practitioners. She was awarded a CBE in 2014 for services to education and training in the cultural sector. What if the development of learners' creative capacities was put at the heart of all apprenticeships?

Pauline Tambling

Expectations of work are changing. It is very rare now for workers to stay in one company for a whole career. Workers chop and change. Permanent employment is being replaced by short-term contracts and dependency on freelancers. On current trends, there will be more freelancers in the UK than those working in the public sector by 2020.¹⁹ Young people entering the job market now will not be in a 'career for life' and will have a series of jobs over a career. They may become 'career jugglers', part of the 'slash' generation whereby they have a number of different roles which together make up a weekly income: work that pays the bills supplemented by work that provides more job satisfaction. They might describe themselves as administrator/artist, account manager/website developer or carpenter/DJ, for example.

These changing work patterns present a challenge for a further education and skills sector used to providing vocational learning pathways and qualifications that emphasise specialisation, rather than versatility. Perhaps, in order to meet this challenge, the sector needs to look not to what learners are doing in college or work placements, but to what they are doing elsewhere. Alongside the knowledge, skills and competencies that young people develop in school or college, most also pursue a personal learning interest and often it's a creative one. In their leisure time, young people consume more and more music and media. They may be producing and sharing the content they generate, but may not engage with either at school or college. Free time devoted to these leisure activities may translate to informal earning as DJs

¹⁹ O'Leary, D. 2014. Going it alone. Demos.

or photographers, or from sales on Etsy, for example. I believe that this phenomenon may be key to how creativity could be integrated into apprenticeships.

The changing world of work

As someone who works in the creative industries I often quote the employment figures for the creative sector, which is the fastest growing in the UK, with 1.8 million jobs. The UK creative industries have doubled in the last 10 years and have proven resilient through recession. But there is, perhaps, a more interesting statistic about what we call the 'creative economy'. By this we mean the 'creative' jobs in the UK economy as a whole. This would include innovators in technology companies, digital teams in retail or marketeers in manufacturing, for example. It might also include an individual setting up an online craft company or a small events company. In 2013, the creative economy represented 2,616,000 jobs and grew by 44.8 per cent from 1997.²⁰

In this fast-changing world of work, however, we have to go wider and consider the importance of creativity in all jobs. Research by Frey and Osborne²¹ suggests that as much as 47 per cent of total employment in the United States is at risk due to automation. No longer just an issue for low-paid workers in the manufacturing sector, digitalisation is also impacting on professional roles like accountancy and management along with retail and customer services, as more and more processes go online. For the swelling ranks of freelance or self-employed workers, 'making a job' – setting up a business, for example – is as important as 'finding a job' and only the most adaptable survive. In this context, the attributes of creativity – curiosity, problem-solving, collaboration, risk-taking, thinking 'outside the box' – are important across the board.

All businesses need to be forward-facing and fresh thinking and increasingly we're understanding the value of creativity in jobs where it

²⁰ DCMS (Department for Culture, Media and Sport). 2015 Creative Industries Economic Estimates – January 2015 Statistical Release.

²¹ Frey, C.B. and Osborne, M.A. 2013. The Future of Employment: How susceptible are jobs to computerization? Oxford: University of Oxford.

hasn't always been considered a priority. Research for Creative and Cultural Skills and Skills for Care,²² for example, outlines the benefit of the arts and creativity to people in care settings in the context of the severe staffing shortages in this sector. Applying creativity to the role of care providers so that service provision addresses the whole person, not just their physical needs, can enhance both service delivery to clients and patients, and the job satisfaction of care workers.

Most further education institutions provide their students with industrybased opportunities through work experience and 'live briefs' but what of creativity? As the Institute for the Future's *Future Work Skills 2020* has argued:

The ideal worker of the next decade is 'T-shaped' – they bring a deep understanding of at least one field, but have the capacity to converse in the language of a broader range of disciplines. This requires a sense of curiosity and a willingness to go on learning far beyond the years of formal education. As extended lifespans promote multiple careers and exposure to more industries and disciplines, it will be particularly important for workers to develop his T-shaped quality.²³

This 'T-shaped-ness' could be called 'creative thinking' and its importance is not confined to graduates. It's essential for all workers. Young people in apprenticeships are learning a deep understanding in a technical area but they also need the attributes that will keep them questioning how things are done throughout their career.

Creativity within apprenticeships

Apprenticeships are in the news. Not only has the government set a target to achieve three million apprenticeship 'starts' by 2020, it has also

²² Consilium. 2013. *What do we know about the role of arts in the delivery of social care?* Leeds: Skills for Care.

²³ Davies, A., Fidler, D. and Gorbis, M. 2011. *Future Work Skills 2020*. Institute for the Future for University of Phoenix Research Institute. http://www.iftf.org/ futureworkskills/

set in place major reform of how apprenticeships are structured, assessed and funded. The current 'frameworks' remain in place for the foreseeable future, gradually to be replaced through the Trailblazer process that will see new apprenticeship 'standards' designed by employer groups. I'm in no doubt that stronger employer engagement provides an opportunity to strengthen apprenticeships and the possibility of achieving the long-hoped for 'parity of esteem' between vocational, technical education and academic routes. But let's face it, it has never been easy for colleges to engage with most businesses: it's always easier to work with the big ones. Now that the government is sending a loud message to employers that it's important to engage with apprenticeships, the door is open to enterprising colleges to make that relationship work.

The most popular apprenticeships are also the most well-established – such as engineering, electrics, plumbing and hairdressing – but some of the new industries, such as design, IT and accounting, are trending now. Some of these occupations offer the potential to 're-brand' apprenticeships and put them in the spotlight, but they don't *all* offer integrated opportunities to develop the creative capacities apprentices need to adapt to the new, ever-changing employment landscape.

So, how might employers and learning providers show a joint commitment to developing apprentices' creative capacities? Two opportunities present themselves:

1. Apprenticeship standards should include opportunities to work collaboratively with other apprentices. One of the big issues with apprentices is that they tend to be alone in the workplace without the sense of a peer-group that a school or university student might have. Making it a requirement that apprentices from different companies take part in activities together could help them build networks of peers, as well as develop their creative capacities. Most apprenticeship frameworks and standards have a business element so enterprise and entrepreneurship are obvious areas within which to locate these activities, framed as 'real-world' tasks. I hesitate to use the BBC's *The Apprentice* as

a model here but getting groups of engineering or construction apprentices to tackle real-world business problems in teams (without the cameras, of course) might be a start.

Key to such team-working tasks would be the ability to work autonomously, to tackle problems and find solutions and to de-brief each task to clarify lessons learnt. Much as any other attribute, creativity needs to be practised, honed and improved. Live briefs and project work run the risk of relying on 'winging it' without the requisite skills development and progression, so it's important that learners are able to log the 'on the job' learning and de-brief with tutors to identify specific skills gaps. Such learning gaps can be addressed in a planned and tracked way between tasks.

2. Apprenticeships should revisit the tradition of the 'apprentice piece'. Some of the crafts, such as goldsmithing, silversmithing and hand engraving, have centuries-old traditions of apprentices working alongside a 'master'. Traditionally, at the end of their apprenticeship, each apprentice created an 'apprentice piece' in order to demonstrate their skill level to other masters. If the piece met the required standard, the apprentice was 'freed' from their indenture. Today, as well as these traditional roles, there are also hybrid traditional/contemporary crafts, such as artist-blacksmith, where apprenticeship still culminates in the creation of a piece of art or a piece of furniture.

The apprentice piece needn't be confined to craft-based apprenticeships, however. Extending the principle to require all apprentices to create a final piece in a medium of their own choosing could provide the mechanism to validate those creative outlets that all too often escape the attention of educators and to encourage learners to connect their (private) passions with their working lives. There could be innovative ways of encouraging apprentice pieces in new media, music, upcycling or making that are not strictly connected to the specific job role but illustrate breadth of interest and creativity and demonstrate abilities outside the occupation to which they are apprenticed. Recognition of independent creative activity could well be blended in through programmes like Arts Award (Trinity College London), which recognises young people's arts activity and could equally recognise their creative enterprise or endeavours too. This could sit alongside an apprenticeship to recognise that the apprentice has a hinterland beyond the direct area of study or skill. The presentation or exhibition of the apprentice pieces could also form the foundation of graduation events to celebrate achievement and to mark progression onto the next stage of a career – both functions currently not provided for.

So, what next?

Over the last few decades of New Public Management approaches to regulating the education and skills system, a default position has emerged whereby debates about raising academic standards fail to address the employment context in which young people are growing up. The need for a re-emphasis of creativity is less about how to weave a creative curriculum into an increasingly formulaic national curriculum in schools, and more about recognising that the 21st century requires fast-thinking, risk-taking, collaborative individuals who can respond to a world that changes dramatically all the time, not decade by decade. We need all our young people to be creative, and to practise being creative. We seem to be moving backwards in school education with creative subjects being squeezed out through initiatives such as the EBacc but we have never explicitly tried to embed creativity within vocational education. Perhaps with apprenticeship reform, a target of three million 'starts' and a plan through the apprenticeship levy to raise £3bn from big employers there's an opportunity to embed creativity now.

What would success look like?

My experience of meeting apprentices is that many are super-talented, confident, assertive individuals who have come to the view that school is not for them. The ongoing push in schools for more metrics and a tighter focus on academic learning, has had the unfortunate effect of

pushing them out to the margins. Apprenticeships that go beyond the technical specialism and offer a genuine alternative to school or taught courses are one answer to this potential loss of talent, particularly if there are options to progress into higher-level apprenticeships.

Employers may think they know exactly what they need in terms of technical skills but the Office for National Statistics' latest economic output and productivity release reveals that output per hour in the UK is 18 percentage points below the average in the G7 group of industrial nations.²⁴ Increasingly, more and more employers are realising the need for flexible all-rounders with a positive attitude and a willingness to work hard. They don't want 'cogs in the machine' – they are looking for enterprising, communicative individuals who are going to help their business thrive. If we can empower individuals and improve productivity, that would be a prize worth striving for.

Response

Shakira Martin

Universities, often through students' unions, spend millions of pounds enhancing the experience that students in higher education get for forking out £9,000 a year to study. The benefits of these activities, from political and social experiences to sports and volunteering, are clear and explicit – explicit to the point that employers will often be more interested in what you've achieved alongside your degree than the degree itself. It's this 'added value' of university life that has allowed successive governments to justify a growing fees and loans model in higher education, assuring students that their financial investment will return higher employability, higher wages and better opportunities.

Students in universities get to take part in altruistic activities, such as volunteering on projects with local residents, or skill-development opportunities, such as chairing the university basketball team. Their

²⁴ Office for National Statistics. 2015. Statistical Bulletin: International Comparisons of Productivity – First Estimates 2014. http://www.ons.gov.uk/ economy/economicoutputandproductivity/productivitymeasures/bulletins/ internationalcomparisonsofproductivityfirstestimates/2015-09-18

apprentice peers of a similar age, still going through post-compulsory education, are not granted similar opportunities. In light of the *Post-16 Skills Plan*, the proposed growth of Level 4 and Level 5 national colleges and the push for degree-level apprenticeships, how can this be?

It's a fair comment to say that, often, those taking an apprenticeship are not interested in attending university or don't want the traditional university experience. It is also fair to point out that much of that is down to the perception that the teaching and learning methods used in university are too much like the school experience. It doesn't follow that those taking apprenticeships neither want nor deserve similar opportunities delivered in some respect through the training provider, or maybe even the employer, which build their personal and civic experience – but the higher education model for achieving that isn't particularly feasible.

The National Society of Apprentices (NSoA), an umbrella organisation of the National Union of Students (NUS), has spent the last three years advocating for and delivering apprentice voice, both locally and nationally. Through a membership and affiliate model, apprentices are engaged democratically and consultatively to shape policy, lobby government and make changes to apprentice provision and support.

Take Sean, for example. Sean is currently finishing his term on NSoA's leadership team. During his time as an apprentice, he flagged in a meeting that apprentices weren't entitled to statutory sick pay, which was leaving a friend of his out of pocket. This led to the apprentice leadership team deciding that they should commission some research looking at the financial experience of apprentices. The research highlighted the different financial barriers apprentices faced, telling stories about those with second jobs, credit card debt and extortionate travel costs. The research they commissioned was used by the apprentices to lobby the government, which, in part, led to the apprentice minimum wage being raised to ± 3.30 . Although the rise is nominal and apprentice wages are still not attractive or feasible for many, the rise did at least mean that apprentices became eligible for statutory sick pay.

It is not surprising that, for many employers, having a civically engaged young workforce isn't a top priority. After all, employers are taking

on apprentices to meet a skills and economic need, not because they have been compelled to create an alternative learning environment for young people. But why should those opportunities so embedded in employability and personal development be the exclusive right of young people in higher education?

Some training providers do, however, support this vision of making sure apprentices receive a comparable experience, because they believe in the idea that their learners should have agency over their educational experience and understand and engage in civic life. Jake, a former member of NSoA, took an apprenticeship as a coach builder and spent one day a week at Doncaster GTA. Learner voice and representation was delivered as part of the course and Jake found real personal benefits in learning how to advocate and negotiate on important issues:

I often found myself arguing or falling out with other members of staff and struggled to express my opinion or views in a way that wouldn't cause trouble. After attending a few meetings and seeing other people I realised this was a great way of getting involved and to be a part of trying to improve things in and out of college. I also learned how to express myself without getting angry or shouting. It's been really useful learning how to deal with different types of people.

Apprenticeships should be about education for a career, not training for a job. The responsibility for civic and social education shouldn't just fall within the remit of more 'traditional' institutions, and if businesses want a stake in educating and training a generation of young people, their commitment can't just stop at the levy. By choosing an apprenticeship, a young person makes a significant financial investment in their education. They chose to take up a training placement that often pays them sizably less than an entry-level wage. If we are serious about apprenticeships being 'powerful motors of social mobility' shouldn't all those tools be right at the heart of the system?

Shakira Martin is Vice-President, Further Education, National Union of Students. She was re-elected uncontested for a second term in 2016 and has been the champion of a campaign to demonstrate to ministers the impact area-based reviews are having on learners.

5

Bill Lucas is Professor of Learning and Director of the Centre for Real-World Learning at the University of Winchester. An acknowledged thought leader in pedagogy and the author of many books and articles about learning of all kinds, Bill is a founder member of the City and Guilds Alliance for Research in Vocational Education. What if the further education and skills sector realised the full potential of vocational pedagogy?

Bill Lucas

In all the recent government documents about vocational education my favourite quotation is: 'Learners must demand high quality pedagogy which will necessitate that stronger links are built between employers, teachers and teaching'.²⁵ I imagine thousands of apprentices rising up from their labours to march on the Department for Business, Innovation and Skills in London shouting 'Pedagogy! We want better pedagogy!'

In your dreams! For in the UK, despite my and my colleagues' best endeavours,²⁶ 'pedagogy'²⁷ is a word that is rarely used by those working in FE and skills. Instead, conversation all too easily turns to funding formulae, new kinds of institutions, reformed qualification systems, different apprenticeship specifications and the like. All of these have value but none is as essential as the high-quality teaching and learning methods which sit at the heart of all excellent vocational education. For it is pedagogy which is the beating heart of the vocational body politic.

Let's dream on a while.

Of course, before we can think about vocational pedagogy we have to think hard about what we want it for, what outcomes we desire. It is

²⁵ BIS and Skills Funding Agency. 2014. Skills Funding Statement 2013-2016. London: Department for Business, Innovation and Skills.

²⁶ For example, Lucas, B., Claxton, G. and Spencer, E. 2012. How to teach vocational education: A theory of vocational pedagogy. London: City and Guilds.

²⁷ Vocational pedagogy is the science, art, craft and gumption of teaching for employment and for employability. Pedagogy also fundamentally includes the decisions which are taken in the creation of the broader learning culture in which the teaching takes place and the values which inform all interactions.

here that many thinkers about vocational education fall down. For vocational education can too easily be defined as if it is essentially about the acquisition of the competences or skills wanted by employers. Such a definition is too narrow and too unambitious. Whether we are talking about apprenticeships or vocational education more broadly, we need to think big about what our desired outcomes are. There are, I believe, six:

- Routine expertise a set of necessary skills developed through practice in a range of familiar settings and honed through feedback.
- Resourcefulness being able to deal with the unexpected, the non-routine; something that can be cultivated through practice in a range of contexts, by simulation and role play and through contact with many others.
- Craftsmanship an ethic of excellence, a sense of pride in a job well done, acquired through mentoring by outstanding role models and supported via cultures in which it is never acceptable to do work that is second best.
- Functional literacies numeracy, literacy, ICT and graphical capability, often requiring the expertise of many others in any workplace or skills setting.
- Business-like attitudes a recognition that someone is paying for the product or service and all of the attendant skills of selfpresentation and self-organisation to deliver these in a timely and respectful way.
- Wider skills for growth all those invaluable and soft and noncognitive skills – self-belief, empathy, self-control, perseverance, collaboration and creativity, acquired by developing strategies and tactics in the context of learning in colleges, with training providers or workplaces.

All too often, we focus on the first and the fourth of these and omit the rest. Vocational education is consequently diminished, a poor second to general education. But if we can agree on a set of unambiguously aspirational outcomes then we start to ask and answer some better

questions which will, in turn, enable us to select the teaching and learning methods which are likely to work best.

I am not alone in making this kind of case. In different contexts and over a number of years, arguments for one or more of these six outcomes have been made by many researchers, including Guy Claxton,²⁸ Alison Fuller and Lorna Unwin,²⁹ Angela Duckworth and Martin Seligman,³⁰ Ron Berger,³¹ David Perkins³² and Lois Hetland.³³

We need to ask about the nature of the work being prepared for, about the age and experience of the learners and about the demands of any specific courses or qualifications. We need to understand the contexts for learning, the spaces and resources available and the levels of teaching experience and capability on hand.

Let's look at just one of these variables, the nature of the work and the 'materials' it requires. At the Centre for Real-World Learning, my colleagues and I suggest that, broadly speaking, people work with physical materials (like a plumber and pliers or boilers), with people (like someone undertaking childcare dealing with children and their parents) or with symbols (like an accountant manipulating numbers). In many cases, we are working simultaneously across all three. Engineers are a good example of this.

We need to ask about the nature of the work being prepared for, about the age and experience of the learners and about the demands of any specific courses or qualifications. We need to understand the contexts

²⁸ Claxton, G. 2013. School as an Epistemic Apprenticeship: The Case of Building Learning Power. London: British Psychological Society.

²⁹ Fuller, A. and Unwin, L. 2008. Towards Expansive Apprenticeships: A commentary by the Teaching and Learning Research Programme. London: TLRP/ESRC.

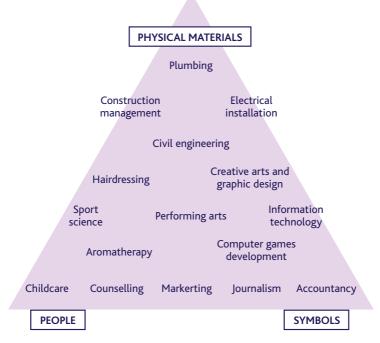
³⁰ Duckworth, A. and Seligman, M. 2005. Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. *Psychological Science*, 16(12): 939–944.

³¹ Berger, R. 2003. *An Ethic of Excellence: Building a culture of craftsmanship with students*. Portsmouth, NH: Heinemann Educational Books.

³² Perkins, D. 2009. *Making Learning Whole: How seven principles of teaching can transform education*. San Francisco: Jossey-Bass.

³³ Hetland, L., Winner, E., Veenema, S. and Sheridan, K. 2007. Studio Thinking: The real benefits of visual arts education. New York: Teachers College Press.

for learning, the spaces and resources available and the levels of teaching experience and capability on hand. Let's look at just one of these variables, the nature of the work and the 'materials' it requires. At the Centre for Real-World Learning, my colleagues and I suggest that, broadly speaking, people work with physical materials (like a plumber and pliers or boilers), with people (like someone undertaking childcare dealing with children and their parents) or with symbols (like an accountant manipulating numbers).³⁴ In many cases, we are working simultaneously across all three. Engineers are a good example of this.



I am not seeking to make an overly precise distinction between different materials, just pointing out that, with vocational education, it helps to understand these things at a more granular level. So, in terms of learning to work with physical materials, expert instruction with feedback, imitation and trial and error will be useful methods. When working with, for example, elderly people in a care home the notion of trial and error is not so smart; role play, simulation and close observation

³⁴ The figure is taken from Lucas, B., Claxton, G. and Spencer, E. 2012. Op. cit., p. 36.

may be more useful. And when dealing with symbols – words, numbers and images – spreadsheets, virtual environments and worked examples may unlock the learning.

Assuming similarly careful scrutiny has been undertaken of learners, teachers and context, then a veritable cornucopia of possible teaching and learning methods present themselves. Here I have grouped them into nine broad categories:³⁵

- Learning from experts by watching and imitating and by listening, transcribing and remembering.
- 2. Practising through trial and error, experimentation or discovery and deliberate practice.
- 3. Hands-on by making, by modelling, by drafting and by sketching.
- 4. Feedback for learning using assessment for learning approaches, through conversation, by reflecting and by teaching and helping others.
- One-to-one by being coached and by being mentored and by helping others.
- 6. Real-world learning by real-world problem-solving, through personal or collaborative enquiry and by thinking critically and producing knowledge.
- 7. Against the clock by competing, through simulation and role play and through games.
- 8. Online through virtual environments and, seamlessly, blending virtual with face to face.
- 9. Anytime on the fly, making use of the unexpected.³⁶

If the UK realised the full potential of vocational pedagogy, then all those who teach – advisers, coaches, guides, instructors, lecturers,

³⁵ Here I am drawing on Lucas, B. and Hanson, J. 2015. *Remaking Apprenticeships: Powerful learning for work and life*. London: City and Guilds.

³⁶ It is not possible here to do justice to the wealth of scholarship which exists regarding each of these nine groups of methods but the references in our report (2012) into vocational pedagogy will enable readers to find out more.

mentors, trainers, tutors and so on – would be able to select the best blend of methods, matched for specific learners in the specific contexts in which they found themselves. In turn, this would help develop learners/workers who were skilled, resourceful, craftsmanlike, literate and numerate, customer-oriented and highly capable individuals.

The world would be our vocational oyster and there would be many beneficial outcomes. Here I express this line of thought as a theory of change, working backwards from the idea of being a global leader in vocational pedagogy.³⁷

If:

- We are more ambitious about what we want vocational education to achieve, and
- Teachers are better able to select learning methods which will achieve our desired outcomes

Then:

- More students in vocational education will achieve better outcomes,
- More students will make FE a destination of choice, sometimes progressing through it to HE, and
- The esteem with which vocational education and the FE and skills sector is held will rise dramatically

So that:

- Both business competitiveness and social mobility will be enhanced, and
- Learners will be more capable, more employable and better citizens

So that:

- More teachers want to work in the sector, and the sector becomes better funded, and
- More and thriving research centres in FE and skills will be created to share best practices

³⁷ See, for example, Center for Theory of Change: http://www.theoryofchange.org

So that:

• The UK truly is a global leader in vocational pedagogy.

Many will want to say:

- But what about funding?
- And examinations?
- And Ofsted?
- And organisational structures?
- And parity of esteem between 'vocational' and 'academic' education?

To which I reply that these have indeed been the kinds of questions we have been grappling with a long while. But in this flight of possibility thinking it is vocational pedagogy on which I have chosen to focus as an under-recognised force for change.

Of course, it's too late to leave this kind of thinking to choices made at ages 14 to 19 at school or college or even to skilled curriculum designers in the FE and skills sector. We need to start in primary education with an explicit list of capabilities as well as the subjects which make up any curriculum. In this way, as well as developing good spellers we can boost children's perseverance at the same time. Or while learning about the Tudors we can be cultivating empathy for the many ordinary people who did not live in palaces.

Pedagogy for the cultivation of capabilities and character needs to be explicit and embedded in the teaching of individual subjects. Guy Claxton and I have written extensively about how this might be achieved.³⁸ Most recently, in *Educating Ruby: What our children really need to learn*,³⁹ we suggest that there are seven core capabilities which every child needs to learn that will form the bedrock of their life as a powerful learner. They are confidence, curiosity, collaboration, communication, creativity, commitment and craftsmanship. Our 7Cs

³⁸ See, for example, Claxton, G., Chambers, M., Powell, G. and Lucas, B. 2012. *The Learning Powered School*. Bristol: TLO Ltd; and Claxton, G. and Lucas, B. 2013. What kind of teaching for what kind of learning? London: SSAT.

³⁹ Claxton, G. and Lucas, B. 2015. Educating Ruby: What our children really need to learn. Carmarthen: Crown House Publishing. http://www.educatingruby.org/

are so named for ease of remembering. But each can trace its roots to a strong research basis and for each I could take you to promising practices in schools and colleges.

Do educators, politicians and researchers in the UK really see the power of vocational pedagogy today? Only in my dreams to date. But I can see just how we might work together to bring it about and it will not be a moment too soon.

Response

Stuart Rimmer

In his essay, Bill Lucas provides a rich painted landscape of what might be. He defines six possible outcomes that the sector should seek. Many of these outcomes are in the service of employers. However, the last, termed 'wider skills for growth', provoked the most interest in me. I would argue that this is the core essence and purpose of further education beyond the obvious craftsmanship and functional literacies. The joy within his discourse concerns the essential necessity for the sector to both raise and then consider fully 'what' and 'how' we teach.

Beginning a more meaningful debate about the purpose of further education, whether we are prepared to invest in it and how, as a nation, we value this resource is helpful. Improving social mobility, and, implicitly, reducing inequality and improving wellbeing surely should be a measure of whether further education is working.

Qualifications are very important, as they are the portable currency of our current understanding of education. A better consideration might be to ask what students actually need. As educators, it is arguably our moral responsibility to find the answer to that question first. The role of a qualification will only be a narrow and single dimension for success. So, what else?

Academic success and the development of a student's character and wellbeing are intrinsically linked. The latter dimensions should not be bolted on as an afterthought; nor should they be thought of as simply 'nice to have'. The development of character and values must sit next to, and interact with, the technical or academic training.

Ask any employer what is it that they are interested in when recruiting. The discussion will always begin with a technical description but very quickly moves to notions of teamwork, honesty, enthusiasm, the ability to interact socially and take responsibility and those first levels of the expression of leadership. Ask someone what it is to be a good friend or neighbour. They will give you a similar list.

The underfunding of the sector leads to a focus on efficiency but rarely to effectiveness. We are often isolated in our own colleges without looking out at a joined-up system. In a strong system we would create strong bonds from pre-school through to postgraduate study. While we can prove some technical outcomes have been improved, we often fail to ask the questions: 'Who has been left behind?' 'At what future costs?' 'Are all students able to achieve their potential to lead rich and fulfilled lives?'

The current obsession, expressed by local enterprise partnerships (LEPs) and government departments is, sadly, one of exclusively economic impact. They talk endlessly of skills gaps in strategies, dangers of unemployment (rarely under-employment) and the 'necessity' of growth (economic not human). Some of the answer to closing the productivity gap is development of skills. If we have skills shortages then our focus must be on skills training, which is dictated exclusively by labour market information and employer-led organisations. This is a sound argument if the sole purpose of education is to provide a compliant, well-drilled and competent workforce to support only industrial aspirations. But if we wish all our citizens to be happy and flourishing, if we desire lower crime rates, better social cohesion, increased social mobility, richer arts and cultural contributions, improved fitness and physical wellbeing, and better mental health outcomes, then we must set aspirations higher and broader.

To achieve the first set of aspirations could be seen as to require only a 'skills factory', industrial input/output model. The second, however, requires meaningful engagement within the challenge of developing character and wellbeing; helping people live smarter and more grounded

lives; building the foundations of strong mental resilience; better understanding our strengths as much as our weaknesses. This can only happen in values-led institutions focused on education not just skills.

In terms of wellbeing, colleges could and should help learners develop their self-awareness, and understand preventative strategies to deal genuinely and confidently with the ups and downs of real life. It requires support, good teaching and sophisticated learning. The cost of doing this early on might mean an increase in the overall cost of education but the long-term benefits should be obvious. Thus, a broad education is a social investment. The question begins to emerge 'What are we willing to pay for?' and 'How can we more sensibly measure best public value?'

Furthermore, if we spend more time focusing on the broader aspects of an education then I believe that academic success and technical proficiency must follow. We must want our young people to be higher in the happiness tables, achieve better academically, based on their potential and not where they are born, and enjoy economic prosperity in meaningful and varied lifelong work. To do this, for me, the answer is simple: let's bring back a balance between skills and education in our colleges, and ensure that sufficient reward is provided for these more positive social aspirations.

Stuart Rimmer is Principal of Great Yarmouth College. He was previously Director of Quality and Enterprise at Lancaster and Morecambe College.

6

Carole Stott MBE is chair of the board of governors at Bath College. She is also chair of the Association of Colleges' board and WorldSkills UK, which is responsible for WorldSkills competitions and the Skills Show. What if college governors took a more dynamic, central role in strategy development?

Carole Stott

At its heart, good governance is about mission, values and strategy. This should be true in any sector, not just further education. Of course, all corporate governance has a duty to protect the interests of the college, company or organisation; and in the case of charities, including exempt charities such as colleges, this means acting in the best interests of the charity's beneficiaries. Good corporate governance must also scrutinise and oversee the organisation's performance, within a framework of accountability that ensures that strategies are effectively executed, risk is managed, and the longterm value of the organisation is secured.

But whatever the sector and whatever the nature of the organisation, the very core of good governance is being absolutely clear about the mission; everything else falls from this. For a college governing body this means having a clear and collective understanding of the kind of college you are, the purpose you are serving, and the values you hold: all of these should be driving corporate decisions, mindful of the duty to protect the interests of those the college serves, and to provide public value in the context of the policies of the elected government of the day.

College governance has an interesting history. Prior to incorporation in 1993, colleges were under the control of their local authority. Colleges received annual block grants based on expected enrolments and, while allocations varied considerably across local authorities, the differences were not linked to performance or outcomes.

New freedoms, new funding models

The 1992 Further and Higher Education Act changed all this, providing national funding and greater autonomy for colleges. The Further Education Funding Council (FEFC) was established and, on incorporation, each college formed its own governing body, usually referred to as 'the corporation', with the duties and powers of corporate governance for colleges (work-based learning was funded separately through Training and Enterprise Councils).

It is probably true to say that, faced for the first time with a highly complex, unit-based national funding formula which introduced competition in the FE sector, the main focus of attention for many college boards soon became funding and finances. The fiduciary duties of college governors in this newly independent and competitive FE world often dominated thinking and decisions. Certainly, college governing bodies had the autonomy to set strategy and the freedom to innovate within the funding rules, but a key driver was growth in order to gain competitive advantage. And there is no doubt that while the majority of colleges continued to do their best to serve their local communities, a small number of college leaders made bad decisions and choices operating in this turbulent environment where new freedoms and funding models created perverse incentives for short-term funding gains.

The policy landscape since incorporation has been in almost constant flux. It has swung back and forth between locally devolved choice and control, and national and centralised funding and policy decisions where government defines skills needs nationally and directs what colleges will deliver and to whom. In reality, the policy context for colleges has been chaotic as different governments and different ministers have tried to exert direction but failed to predict the behaviours and, therefore, the consequences of their decisions. This has led to swift changes of direction as the unintended consequences of their policies became clear.

Centralised strategic planning

FEFC lasted only seven years. The New Labour government replaced it with the Learning and Skills Council (LSC) in 2000. The policy direction and strategy changed radically from a market-led competitive approach to a centrally planned model, as the LSC was given responsibility to fund and regulate all learning and skills post-16 (excepting higher education). The LSC's role was in effect to provide centralised strategic planning for skills.

The LSC did introduce Individual Learning Accounts (ILAs) with a view to encouraging learners to take more control of their own learning and providers to be more responsive to their needs. The scheme, however, was very seriously flawed and was closed down after only 18 months, following examples of fraud and a clear lack of quality control.⁴⁰

The failure of the ILA scheme led to ever-increasing centralised control of the skills market. The success of a college, and in particular its financial success and sustainability, was driven by its ability to deliver the qualifications prescribed by national government, and so, not surprisingly, governing bodies tended to focus their attention on this. Within this nationally planned and controlled system there was minimal opportunity for a dynamic model of governance that focused on strategy and meeting local employer and community needs. Indeed, any move away from delivering nationally prescribed qualifications presented a significant threat to income, the majority of which came from the public purse via the LSC. Not surprisingly, therefore, while colleges remained keen to respond to and serve their communities, a typical model of college governance became one more focused on compliance, finances and supervision. Many governing bodies became increasingly frustrated as their role was diminished to passive 'deliverers' of national 'provision'.

Like its predecessor, the LSC was closed in under a decade by the Labour government's Apprenticeships, Skills, Children and Learners Act of 2009. In the following year the coalition government came to

⁴⁰ NAO (National Audit Office). 2002. *Individual Learning Accounts*. London: The Stationary Office

power. Faced with a fiscal deficit and economic recession, an era of austerity and cuts to public spending began, and policy direction and funding for skills and colleges changed yet again.

Changes since 2010 have included: a raising of the participation age to 18; significant changes to curricula and qualifications for 16–19 year olds; requirements for all young people to continue to study English and maths; funding cuts to adult skills of 40 per cent in real terms; funding shifting from workplace learning to apprenticeships; the introduction, and then extension, of a loans system for students; devolution of some funding and some powers to combined authorities and city regions; apprenticeship trailblazers led by employers; a target of three million apprentices, funded by a levy system for large employers; and reformed technical education routes.

Localism and devolution

This list of changes is not comprehensive but it is not the purpose of this article to analyse policy detail. It does, though, illustrate the number and complexity of issues that face college governing bodies. However, the one clear change since 2010 which has probably had the most significant impact on governance has been the so far consistent move to devolve greater freedom and control to college governing bodies, providing them with more discretion and control to set strategy and respond to local needs. When he took up post as the coalition government's Minister of State for Further Education, Skills and Lifelong Learning, John Hayes described FE as having been 'infantilised' by central direction and micro-management, and he vowed to change this.⁴¹

The coalition government set out its reforms to further education and skills post-19 in *New Challenges, New Chances*⁴² and clearly signalled this as an important change of direction. A key element of the reform programme was:

⁴¹ See, for example, his speech to AoC national conference 2010: https://www.gov. uk/government/speeches/association-of-colleges-annual-conference--2

⁴² Department for Business, Innovation and Skills. 2011. New Challenges, New Chances. Further Education and Skills System Reform Plan: Building a World Class Skills System. 1 December 2011.

Strategic Governance for a dynamic FE sector: our removal of restrictions and controls on college corporations paves the way for new roles for governors working closely with other educational providers in post-14 learning, and local stakeholders such as Local Authorities and Local Enterprise Partnerships (LEPs) to take the lead in developing delivery models to meet the needs of their communities.

For most staff and governors in colleges, this recognition of their desire and ability to serve and support their communities was extremely welcome. However, it is also fair to say that it was initially met with a degree of scepticism by some of those who had experienced the promise of greater freedoms before, only to see those freedoms evaporate as government reverted to centralised control. It is perhaps also fair to say that a number of governing bodies, which had become used to operating in a context of national control and direction, did not have the right mix of skills and experience to build the strong local relationships and supply the kind of dynamic leadership needed. Development from a passive and conformance model of governance to a more dynamic and creative one needed some time to mature.

In the five years since the publication of *New Challenges, New Chances*, despite continuing churn in skills policy and severe cuts in funding for FE (or perhaps because of it), the move to greater freedom and responsibility for college governing bodies has remained fairly constant. Notwithstanding a new Conservative majority government, new ministers, and near crisis in the finances of a number of colleges, which led ultimately to the area review process for all FE colleges in England, government has not backed away from autonomy for colleges. Indeed, the area review process has emphasised the autonomy of colleges and the essential role of governors in the process and in taking decisions regarding recommendations resulting from the review.⁴³

⁴³ Department for Business, Innovation and Skills. 2015. *Reviewing Post-16 Education and Training Institutions*.

Governing bodies themselves have also changed and developed since 2010. As greater autonomy has brought with it greater responsibility, so support for governing bodies has become a priority. More support was provided and new codes of college governance were developed and adopted.⁴⁴

A recent analysis by the AoC shows that 41 per cent of colleges now have elected local authority members on their boards and 37 per cent have local enterprise partnership (LEP) representation. In addition, the largest percentage of independent board members (36 per cent) comes from business, finance and law. Twenty-seven per cent come from other public services; 25 per cent from education; and 12 per cent from STEM. These figures are important because good governance depends on having the right people on board.

Opportunities and challenges

We have now reached a position where the policy landscape gives us huge opportunities and well as challenges. We have a combination of devolution of some powers and funding for adult skills to local areas; funding and choice devolved to businesses (via the apprenticeship levy); and to individuals (via loans). Taken alongside the increased freedoms and control for college governing bodies, and their enhanced capacity and capability to understand and respond to local needs, now is the time for colleges to take a leading role in driving strategy for FE and skills.

Certainly, there are fresh risks for colleges. We are used to the tensions created by trying to respond to local needs and demands while having to satisfy national policy and funding rules. Now these tensions are likely to be heightened as more funding and power is devolved locally.

There is a real risk that local ambitions and expectations will exceed what can realistically be achieved and colleges will find themselves subject to unrealistic demands. We have already witnessed tension between national and local governments, where ambitious local politicians seek devolution

⁴⁴ The English Colleges' Foundation Code of Governance, Association of Colleges, 2011; Code of Good Governance for English Colleges, Association of Colleges, 2015.

of further powers and budgets (such as apprenticeship and 16–18 funding). As it stands, the devolved adult education budget will still be subject to nationally determined entitlements that will soak up much of the funds, while the demands locally for adult education are likely to grow. Colleges will therefore have to navigate and try to reconcile demands from national government policy (e.g. for 16-18, apprenticeships, HE, Ofsted) with the increased demands created by devolution.

Nevertheless, this policy context gives us the opportunity to be indispensable partners and leaders in our communities. We have the opportunity and the wherewithal to build strong and meaningful relationships and partnerships that can generate innovation and deliver local solutions to support local needs. Devolution should provide the political will, as well as the funding to support new relationships within a local ecosystem for skills, regeneration and economic and social progress. The apprenticeship levy offers opportunities for new business partnerships and connections that can make colleges the source and pipeline of talent for businesses.

However, there is no doubt that the challenges facing college boards are increasing not diminishing. The agendas of every college board will currently include: overseeing the huge demands presented by English and maths policy; developing strategies for apprenticeship growth and managing the risks associated with the new levy system; engaging in area reviews and then overseeing the implementation of any recommendations (including mergers and setting up new structures or companies); scrutinising quality and dealing with Ofsted; overseeing financial strategy when faced with cuts to public funding; developing and overseeing estates strategies; and ensuring the learner voice is heard. Again, the list is not comprehensive but it will be familiar to all boards and represents an important and essential part of our role.

Monitoring the impact and consequences of so many major reforms, and ensuring our colleges respond adequately to increasing and increasingly complex demands places substantial burdens on college governing bodies that could easily absorb their entire attention and capacity. Nevertheless, we need to look beyond the immediate issues, dilemmas and crises and try to shape a longer-term view of our role and identity. Fundamentally, we are there to ensure that our college is responding to local needs. We have to look up from the knitting and see if the garment we're making fits. We have to understand the shape, texture, style and quality of what is required. We need to properly review and continue to strengthen our own governance arrangements and models to do this and to work confidently and creatively with our local partners to create better futures.

Finding the space and the will to do this in the face of enormous and immediate challenges is not easy. It will require focused and determined effort. This effort, however, is essential if we are not to resort to simply reacting to ever-changing funding models and incentives to drive our behaviour and plans. So perhaps the first and most important task for college governance is to create the space and opportunity to review the mission and distinctive role of the college in its community, and ensure that its governance model and arrangements can support that mission. A college's purpose is an educational and social one. As college governors we need to be absolutely clear about the distinctive purpose of our own college and its role in the community and we should be confident that this purpose is widely recognised and understood. We need to ensure that our governance model is fit for that purpose, and we must have the right people on board who can play their part in determining the strategies that will deliver this.

The right model with the right people

The process of area review requires each college to assess its own longer-term future and contribution to the educational and economic needs of its area. A significant number will also be exploring or developing different organisational models and structures. This affords both the need and the opportunity to review mission, vision and strategy with key stakeholders such as local authorities, business leaders and LEPs, and to then review whether the governance arrangements provide the right model, with the right people and skills to lead and support this mission.

As colleges move from the centralised planning and funding model of the previous 20 years to an increasingly commercial and complex environment where a greater proportion of funding and demand is driven by employers, students and local governments, different skills and expertise are needed. Colleges will need governors who truly understand and are close to the immediate and changing needs of local businesses and communities. Business acumen to operate in this increasingly commercial environment will be essential. Governing bodies will need leadership experience and a diverse range of perspectives that can support innovation and ensure a dynamic model of governance that understands and can help to shape the skills ecosystem in their locality.

Colleges have endured more than 20 years of centrally controlled and chaotic policies and strategies that failed to deliver their ambitions and objectives. We now need clarity of purpose, not the confusion created by continuous policy changes. Purpose and mission is the domain of college governance. We need to understand and be close to our businesses and communities in order to serve their needs. Governance should enable this. We need constant communication and close relationships to understand the motives of others so that we can align our cause with theirs. And we need unity of effort so that we use our combined efforts and resources to good effect. All of these factors are essential to creating strategy that really delivers its vision. All of these factors are supported by good, dynamic governance.

Local, autonomous governance and accountability is the best model for developing effective strategies to meet local needs. If, as a governance community, we do not challenge ourselves and take this opportunity then the likely consequence will be a swing back to centralised control models.

Response

Shane Chowen

Carole Stott's excellent piece provides a succinct yet still exhausting account of the ever-changing policy landscape informing the work of college governors over the last 24 years. I took on my first role in further education governance 10 years ago as a student governor at City College Plymouth. It wasn't long before I understood for myself why 'policy instability' was a common feature of the sector's lexicon. In those days, it was all about Leitch,⁴⁵ balancing investment between the state, employers and learners, demand-led vocational training, increasing apprenticeship numbers ... sound familiar?

A decade later and I'm now in my second college governance role and Carole's essay has inspired me to think about the next 24 years, in particular, about the short- and long-term gains for colleges as we become ever less reliant on central government funding and in the hope of further freedoms from central government regulation. Freedom from central regulation is not the same as deregulation. I've no doubt that as devolution progresses, for example, new forms of local accountability will emerge – which is, of course, a good thing whenever the public's money is involved. But I do believe that the 'freedoms and flexibilities' agenda initiated by the coalition government is only half done, is in danger of being over-stated and yet is vital for us in our missions overseeing innovative, creative and dynamic strategy.

As someone who was told after a flimsy questionnaire during my college induction (thankfully, initial assessment has improved since then) that I was a 'visual learner', I've grown to appreciate a good visual metaphor. I was struck by this one in Carole's piece: 'We have to look up from the knitting and see if the garment we're making fits'.

More than that, dynamic governance should mean taking a look at the tools being utilised to inform strategy and decision-making. Are we still using knitting needles when we could be using something more modern and effective? Colleges are fixed community assets, but that doesn't mean that the services we offer, and the people we serve, are at all static. Labour market data and consumer behaviour analysis are, I believe, tools that governing bodies should be aiming to utilise much more to inform more dynamic strategy. A commercial mind-set, as ideologically challenging as this can sometimes be for governors

⁴⁵ Leitch, Lord S. 2006. *Leitch Review of Skills: Prosperity for all in the global economy* – *world class skills*. London: The Stationery Office. https://www.gov.uk/government/ uploads/system/uploads/attachment_data/file/354161/Prosperity_for_all_in_the_ global_economy_-_summary.pdf

like me with an education background, now has to be accepted as essential. So while the language of markets, consumerism and products and prices and margins used to be uncomfortable, it is without a doubt essential for the future sustainability of colleges. The future of college provision can't be an Argos book of 'Here's what we've got, come and see if our structures and timetables work for you.' A dynamic sector should be able to build provision and qualifications suited to the needs and behaviours of people, informed strategically with good, organised, local planners and funders.

As governors, we'd all be able to make the case that our institutions are meeting local need; courses are recruiting, there are good success rates, learners are progressing, contractual commitments are being met. But what if good governance was no longer about those things? We now have tools available to us to be much more explicit about the direct economic and social contributions we make and it is in this direction that I see dynamic governance deliver. Sure, as a governor I want everyone doing a course at my college, whether that's in a classroom, in the workplace, at home, online or on a smartphone app, to pass, pass well and get something good from it. But I also want to lead an institution which can strategically embed itself in delivering all sorts of local priorities that we know learning and skills can play a big part in.

Devolution of funding for adult education feels to me to be the next stage of the freedoms and flexibilities agenda initiated under the coalition government. A key advantage of adult education devolution done well will be the ability to join up local services to provide better data and outcomes for learners and businesses. Good commissioning could lead to colleges attracting a greater role in supporting a wider range of positive outcomes for people. A flagship feature of Greater Manchester's deal is ownership and control over health and social care budgets.

In coming to terms with what our job is as governors of more commercial, independent institutions, I would argue we have so far been too focused on our own processes and procedures. Formal board and committee composition is of course important. Maybe, though, we should stop pretending that the three employers on our board can be representative of the entire local economy in the same way that we don't expect our two student governors to represent tens of thousands of individual, hyper-diverse learners. We should now turn our attention to the tools we need to inform impact-focused strategy development.

In years to come, colleges will be recognised for their role in reducing the prevalence of mental health problems, improving health and social outcomes for their ageing local populations, reducing unemployment, increasing productivity, reducing poverty, boosting UK skills rankings in OECD league tables, eradicating working age basic skills deficits and much, much more.

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Sir Michael Barber is Pearson's Chief Education Advisor. Previously, he was Head of McKinsey's global education practice and served the UK government as head of the Prime Minister's Delivery Unit (2001–2005) and as Chief Adviser to the Secretary of State for Education on School Standards (1997–2001). What if further education and skills led the way in integrating artificial intelligence into learning environments?

Sir Michael Barber

In 1930, John Maynard Keynes asked what the future held for our grandchildren. He famously predicted a world where technology has exempted us from onerous work, resulting in the central question of how to use our freed-up time wisely and well. Two generations later, in 2015, a clever journalist found a relative of Keynes and asked him how this prediction was going – unfortunately, the relative was used to working over 100 hours a week.⁴⁶

Despite this, the evidence is now mounting that Keynes' essential prediction was right, even if his time-frame wasn't. We are now beginning to understand the implications of an economy re-shaped by smart technologies, enormous data sets and the ability of digital technologies to scale at tiny marginal cost. For instance, the persuasive effects of automation are used to explain the existing data on employment patterns,⁴⁷ wage stagnation and employment.⁴⁸ Separately, it is predicted that about 47 per cent of US jobs are at risk from automation in the next decade or two.⁴⁹

⁴⁶ Kesterbaum, D. 2015. Keynes predicted we would be working 15-hour weeks. Why was he so wrong? NPR [website]. 13 August, heard on *All Things Considered*. http:// www.npr.org/2015/08/13/432122637/keynes-predicted-we-would-be-working-15hour-weeks-why-was-he-so-wrong

⁴⁷ Autor, D. and Dorn, D. 2013. The growth of low-skill service jobs and the polarization of the US labor market. *American Economic Review*, 103(5), pp. 1553–1597.

⁴⁸ Ford, M. 2015. *Rise of the robots: Technology and the threat of mass unemployment*. Oneworld Publications.

⁴⁹ Frey, C.B. and Osborne, M. 2013. *The future of employment: How susceptible are jobs to computerization?* Oxford: Oxford Martin School, University of Oxford. http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

To date, there has been little serious debate about the implications of these profound trends on learning. However, one is already clear – education faces a productivity problem that is only going to get worse.

On the outcome side we need learners who have a wider set of skills, acquired faster and at higher-levels of achievement, than any system has managed to date. This is simply the only way that we can equip – and re-equip – learners with what they need if they are to live and work alongside machines. It would be bizarre if FE was not a part of our response to this new innovation imperative: the civil servant who advised Vince Cable, then business secretary, to abolish FE colleges 'because no-one would notice' clearly didn't have a sense of strategy, or at least not one focused on what is important.

On the input side, it's safe to assume that we will need to do all this without any significant uplift in funding, which means we are on a hunt for resources from somewhere else. Where might they come from?

One answer is provided by an important new report that my team at Pearson recently published. Called *Intelligence Unleashed: An argument for AI in Education*, ⁵⁰ it sets out the rich seam of new resources to be found in the thoughtful application of AI to support learning. In this vision, FE would become much less about buildings and much more like an app store of personalised, relevant, timely and efficient lifelong learning. AI-driven 'learning companions' will be available to advise learners on the next most appropriate learning opportunity; they will understand when the learner might be at risk of forgetting something, or letting a skill get 'rusty,' and will prompt the learner appropriately. Learners will be able to develop high-level skills like empathy, or concrete skills like nursing procedures, in authentic-seeming virtual learning environments – again, with intelligent support to guide them.

Vocational learning will become much more collaborative as students debate and elaborate each other's ideas in online environments. As the

⁵⁰ See https://www.pearson.com/content/dam/corporate/global/pearson-dot-com/ files/innovation/Intelligence-Unleashed-Publication.pdf

Internet of Things (IoT) allows the digital world to interact with the physical, learners will receive useful feedback as they develop craft skills, or learn how to diagnose and fix a mechanical system. Learning will also become much more flexible as these AI-driven tools are provided from the cloud and made available on mobile devices to provide relevant, just-in-time, learning. This will make it easier for disabled students, adult learners who are needing to re-equip for their next career, or maybe simply those with lower confidence levels, to access a re-engineered learning society that is much less place-based and scheduled, and much more application programming interface (API) driven.

The role of the FE lecturer/tutor will be liberated from the burdensome tasks of administration, many of which will now be carried out by the lecturer's own AI-driven assistants. This will free their time to focus on the role of providing the creativity, empathy and ingenuity that only humans can. Probably the job title 'lecturer' will become obsolete, to be replaced with something more like 'learning orchestrator' to reflect their role in harnessing and coordinating all the learning resources – human and digital – now available to them.

Life for employers who are providing apprenticeships will be easier too, as they are able to call upon AI-driven learning experiences that complement and provide the prerequisites for project-based and on-the-job learning. For example, the US navy has developed a digital tutor programme for their IT programme that has been shown to be much more effective than traditional classroom-based learning. Importantly, this wasn't centred around mere rote learning, but in developing – and applying – complex problem-solving skills to real-life contexts. It's easy to see how this could be used in apprenticeship programmes focused on areas such as engineering, or coding, or creating visual effects for TV.

Many of the capabilities involved in this vision are still at the prototype stage, a degree away from the enticing consumer-grade technologies that we will eventually need. So to help my argument (and in case this all sounds like science fiction) let me set out three ways in which existing AI technologies could be usefully deployed to tackle real challenges in the here and now.

AI to help struggling maths learners

It's a fact that deserves to be on the front page of every newspaper on GCSE results day: last year over 160,000⁵¹ 15-to-16-year-olds did not get a grade C or above in maths. For these students, their chances of successfully rectifying this situation are dauntingly less than one in 10.⁵² The vast majority of students who continue their maths GCSE learning do so in FE colleges, which, as a whole, they enter with lower GCSE scores than their peers who continue their maths learning in a sixth-form setting.⁵³

In other words, FE colleges are expected to do most of the heavy lifting of helping the most in-need students acquire the maths skills that are required to effectively participate in society and work.

Given the direness of this picture, it strikes me as simply immoral not to ask how well-designed AI can help here. After all, providing adaptive, personalised support to maths learning is in many ways a low-hanging fruit for AI – maths is a well-defined domain, readily amenable to the modelling that then allows clever algorithms to apply their reasoning. Right now we have tools that can:

- Allow the learning content to be adjusted to what a student already knows, and can do.
- Provide the right hints and tips at just the right time, so usefully 'scaffolding' a student in their learning.
- Help students reflect on how their learning is going, so helping them keep it on track themselves.

⁵¹ Department for Education. 2016. National Statistics: Revised GCSE and equivalent results in England: 2014 to 2015. SFR 01/2016 Table S1. https://www.gov.uk/ government/statistics/revised-gcse-and-equivalent-results-in-england-2014to-2015

⁵² Ward, H. 2014. Thousands of post-16 students fail to gain a C at GCSE maths and English. *TES*, 11 September. https://www.tes.com/news/school-news/breakingnews/thousands-post-16-students-fail-gain-a-c-gcse-maths-and-english

⁵³ Porter, N. 2015. Crossing the line: Improving success rates among students retaking English and maths GCSEs. London: Policy Exchange. http://www.policyexchange.org. uk/publications/category/item/crossing-the-line-improving-success-rates-amongstudents-retaking-english-and-maths-gcsesbreaking-news/thousands-post-16students-fail-gain-a-c-gcse-maths-and-english

There is always a risk that reviewing the existing evidence of impact disguises the potential that lies in more experimentation – which is one reason why I argue for the term 'evidence-informed policymaking' rather than 'evidence-based' – but these well-established technologies are already showing impact sizes comparable to what we'd expect from human tutoring.⁵⁴ That's impact worth having, especially as there are two reasons to be confident that we can achieve even more.

First, because the real prize is making available the positive impact of one-to-one tutoring to every student, in every subject (something simply financially unfeasible without the technology).

Second, because as AI gets better at building its models we'll be able to represent a wider set of attributes – how a student feels, for example – that will help us provide targeted support, at just the right time, in response to all the factors that influence learning. Imagine how helpful this could be to those students who experience the often paralysing issue of 'maths anxiety'.

AI to help make great team members

It's reasonable to assume that the jobs of the future will in many ways make similar demands to those that exist today: for example, students who can think and reason not just alone, but as part of a team. So-called collaborative learning is where students work together to solve a puzzle or a problem, and it needs to be a much greater part of a student's learning experience if we are to meet the need for more high-end collaboration skills.

But making collaborative learning effective is often a tough ask. Many learners will need extra social support to collaborate well (or at all). It is often difficult to identify where that support should be best targeted, and there is always a risk that collaboration becomes chatter, lacking the features of ideas rationally critiqued, built upon and extended.

⁵⁴ Kulik, J. 2015. Effectiveness of intelligent tutoring systems: A meta-analytic review. *Review of Educational Research*, 17 April. http://rer.sagepub.com/content/ early/2015/04/17/0034654315581420.abstract

Technology can provide the online environment where collaboration takes place, but the addition of AI would also provide the intelligent support to allow that environment to be more than a repository of isolated ideas and contributions.

For example, based on models of effective collaboration AI can provide teachers with just-in-time insights that allow them to know where they need to offer extra support, encouragement or direction. Or AI could provide avatars who are themselves part of the collaboration, introducing novel ideas or sparking helpful controversy.

AI to help us develop the very human skills that will remain in demand

As routine cognitive tasks are increasingly automated it is the qualities that make us distinctively human – empathy, storytelling, connecting – that will be in ever-greater demand. For example, Geoff Colvin⁵⁵ suggests that graduates of the future might be better-off studying literature – and so developing skills such as reading social nuance, and understanding someone else's perspective – than studying STEM subjects.

There are many practical implications already. For example, as shopping on the high street becomes more about the experience than the goods bought, retailers will be looking to hire people with the social acumen to be trusted advisers and recommenders. Or, as the demands of an ageing society creates ever-greater demand for the caring professions, the focus will be on supporting care professionals to offer ever more warmth and understanding – for example, to patients with Alzheimer's where the symptoms of the disease often get in the way of human connection.

It seems strange to say, but technology has a role to play in helping FE students of the future tap into their 'humanness'. For instance, by creating authentic-seeming virtual or augmented reality learning environments where, supported by intelligent and well-designed AI,

⁵⁵ Colvin, G. 2015. *Humans are underrated: What high achievers know that brilliant machines never will.* Portfolio.

students can safely practice social interactions and experience emotionally demanding situations.

There's a compelling list of examples that support this proposition. For example, technology is already helping trainee teachers develop their classroom management skills,⁵⁶ victims of bullying develop effective coping strategies,⁵⁷ language learners understand social and cultural norms,⁵⁸ and the US military to train squads on their way to Iraq.⁵⁹

No part of this vision will happen without the right guidance and support. The FE and skills sector is fortunate that the Department for Business, Innovation and Skills already has available many of the mechanisms for making this a reality. For example, it could ask InnovateUK to design and fund a series of challenge prizes that incentivises the best AI in Ed ideas to move from the prototype stage to products trialled and tested in real FE and employment-based learning contexts.

Or it could create a series of AI in Ed labs – sites of co-design between educators, learning scientists and technologists – that would ensure that these new technologies meet real needs and account for the untidy reality of most learning environments (and human lives). With an annual spend of £3.7bn of public money on FE and skills, making available some of that to prompt and support disciplined innovation should not be a tough ask, especially if it results in learning that is a step-change in efficiency, engagement and effectiveness. And, as a neat side effect, we could also secure for the UK a head start in the next generation of EdTech entrepreneurship, creating a wave of innovation that would leap over the Khan Academy manqués that too often feature in pitching sessions.

Together, all this offers the FE and skills sector an opportunity to be placed at the centre of efforts to create a re-designed and fit-for-

⁵⁶ See simSchool Teacher Training Platform: http://www.simschool.org/

⁵⁷ See FearNot! An interactive drama video game available on SourceForge, and Open Source community resource: https://sourceforge.net/projects/fearnot/

⁵⁸ Lewis Johnson, W. and Valente, A. 2009. Tactical language and culture training systems: Using AI to teach foreign languages and cultures. *AI Magazine*, summer. http://www.aaai.org/ojs/index.php/aimagazine/article/view/2240

⁵⁹ See DARWARS entry on Wikipedia: https://en.wikipedia.org/wiki/DARWARS

purpose learning society. That is, one that supports learners to develop the skills and capacities that allow them to access their first job, or the next career path, in a timely and cost effective way, and with a scale and a breadth that no country has managed yet.

In this vision, FE and skills would be at the centre of a new wave of entrepreneurial learning innovation, part of a participatory design process that involves working alongside the most talented researchers and technologists in an iterative process that, over time, will create a learning society that allows us to respond proportionately to the implications of more and more existing jobs being carried out by machines. This would also be a perfect riposte to that civil servant!⁶⁰

Response

Bob Harrison and Donald Clark

For some FE providers still struggling with understanding and implementing the agenda set by the now three-year-old Further Education Learning Technology Action Group (FELTAG) report and ensuring they have a robust and resilient infrastructure and a workforce confident in the use of technology to engage with more learners and improve learning and assessment, talk of the use of artificial intelligence may seem a little premature.

However, many of the original issues raised by Sir Michael Barber are now on the horizon of more enlightened further education providers and are increasingly being used in business and Industry. Advances in technology, increased awareness and heightened learner expectations bring this issue into even sharper focus.

Sir Michael Barber's recommendation for the Department for Business, Innovation and Skills to invest in some exploratory work will now fall to the Department for Education (DfE) but, given the techno-scepticism at

⁶⁰ Parts of this paper are based on a longer treatment set out in a new report from Pearson and the UCL Knowledge Lab on the topic of artificial intelligence and learning. https://www.pearson.com/content/dam/corporate/global/pearson-dotcom/files/innovation/Intelligence-Unleashed-Publication.pdf

the heart of DfE schools policy, this seems unlikely and may result in a missed opportunity.

Ten good reasons why AI can help teachers and learners

Teachers are not ends in themselves. They are always a means to an end: improvements in the learner. Given this premise, could it be possible to eventually use technology, specifically AI, to help teachers teach and learners learn?

1. Searching for answers

We have less need of book and journal warehouses, now that most knowledge is online. Beyond this, open educational resources, such as Wikipedia, YouTube and Khan Academy, have transformed the landscape. All of this is available through AI-enabled search.

2. Student support

A Georgia Tech professor used an AI chatbot teaching assistant to answer the questions of 300 students online, based on previous questions and responses. The assistant's true identity was not revealed until the end of the course. The students praised the online assistant for both efficacy and speed. We can expect a lot more of this, as teacher support gives way to intelligent AI agent support.

3. Demonstrate good subject and curriculum knowledge

Google already provides access to 'knowledge' on every subject. It is now a web-based service with access to huge knowledge bases and AI. YouTube is already the search engine of choice for learning how to 'do' things. With 3D virtual worlds, one can see how learning by doing can be expanded, as it was with flight sims, through cheap consumer technology, high in AI. Tools such as WildFire already use IBM's Watson to enhance the online learning experience, searching for relevant resources that are rated for relevance.

4. Plan and teach well-structured lessons

Lessons or learning experiences can be idiosyncratic, even flawed. Al offers not only optimal design but also continuous improvement, as it uses individual and aggregated data to spot poor components in lessons. Differentiation could be identified and handled by AI in a way that traditional teaching cannot. The promise is of learning experiences that are not only structured towards individual learners but also continuously improve as machine learning identifies and acts on identified weaknesses. AI may even automatically produce lessons and content. This has already been done in the Ufi-sponsored tool, WildFire,⁶¹ where online learning is produced, automatically, using AI, from documents and videos.

5. Promote good progress and outcomes by pupils

Progress tracking is not easy, as it requires the simultaneous tracking of actual performance across many learners. This is notoriously difficult in teaching. Al, on the other hand, promises to do this across many learners in real-time, as it gathers evidence that no teacher can possibly hope to gather through traditional observation and testing. More than this, one could argue that AI has a lot to offer in being free from human biases that sometimes inhibit learner progress. AI can be free from bias on gender, race, accent and background.

6. Adapt teaching to respond to the strengths and needs of all pupils

One of Al's first forays into teaching has been through adaptive systems. These are already at work and producing impressive results.⁶² They act like a Satnav, which constantly monitors the performance of individual learners and adjusts what they are asked to do next. This is done in real time. Content is no longer a linear curriculum of flat resources but a network of learning experiences that can be dynamically delivered to individual learners, based on their precise needs at that precise time. The

⁶¹ See http://donaldclarkplanb.blogspot.co.uk/2016/06/is-online-content-businessover-ai.html

⁶² See http://donaldclarkplanb.blogspot.co.uk/search?q=trial+at+ASU

analytic and predictive strengths of AI may very well identify factors that both inhibit and enhance learning in any individual. Technology has already made a big difference in special educational needs (SEN) teaching; AI will make an ever bigger difference.

7. Make accurate and productive use of assessment

Formative assessment is difficult and largely absent from the lecture hall. There are three ways that AI could improve formative assessment. First, the quantity: adaptive learning systems, could deliver more feedback than teachers. It is self-evident that AI is scalable in the way a teacher is not and can deliver millions of pieces of feedback to millions of learners in milliseconds. Second, AI could deliver higher-quality feedback, which can also be used to determine what is literally delivered next in an online lesson. Formative assessment is one area where AI already excels. Increasingly, we will also see, through AI, immediate feedback, delivered verbally or in text, as AI-driven speech recognition and delivery becomes commonplace. With speech we will move towards the sort of frictionless interface than enables good teaching and learning.

On summative assessment, AI can deliver adaptive questioning and, using Item response theory, deliver assessment that includes learner confidence and other data during the assessment that no teacher could gather. It can also deliver to whatever statutory assessment requirements are in place. Essay marking is reaching a level where it can perform as well as an expert assessor. Automated marking is also becoming more common. Online proctoring uses AI in typing patterns to identify the examinees, as does face recognition for digital identity and real-time face recognition, as the learner takes the exam.

Assessment is clearly one area where AI has made inroads and will continue to do so.

8. Set high expectations which inspire, motivate and challenge pupils

With the emergence of the smartphone, gamification, augmented reality (AR), virtual reality (VR) and frictionless speech recognition, we already

see signs of technology that is both powerful in terms of learning and compelling. AR offers layered experiences. VR offers inspiring, complete immersion and attention, emotional pull, learning by doing, contextualised learning and high retention (witness flight simulations for pilots).

9. Autonomous learning

We can imagine the transformation of schools and colleges into places where learners learn independently and collaboratively, co-creating and co-constructing virtually and online, and not just places where teachers teach. This is a radical shift but as teaching becomes automated so schools become places of learning, not just teaching. There are plenty of online learning courses and degrees out there and learners are starting to do it for themselves. This will necessitate a realignment of the role and skills of teachers.

10. High standards of personal and professional conduct

Teachers provide values and models of conduct that one hopes are emulated. Again, however, we may see the development of attitudinal learning, with simulations which create empathy. AI is already feeding the VR industry with intelligent avatars, which are commonly used in games but increasingly in attitudinal learning. You become the bullied person, the subject of racism, sexism or bigotry.

Conclusion

Few saw self-driving, autonomous cars coming. That happened because of AI. Few may also see the emergence of self-driving, autonomous learners. That may also come through AI. Machine learning not only embodies learning, it learns about learners while they learn. It is like a fast-learning teacher. We're not suggesting that teachers are in any way not valuable or smart, just that AI technology may, as in many other areas, get more valuable and smarter. Further education (and higher education and schools) would be foolish not to take advantage of this but we need a paradigm shift in leadership vision at all levels to make it happen.

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Anthony Painter

The sustained embattlement of the further education and skills sector over the past few years has severely damaged its selfconfidence. As if a resource crunch of hitherto unimaginable proportions was not enough, in wades Her Majesty's Chief Inspector to dismiss (clumsily) the sector as 'failing'.⁶³ Within this melee, it is next to impossible to articulate a clear message of value for further education in the context of national goals of social mobility, inclusivity, productivity and meeting the needs of the future workforce and employers.

Instead of drifting quietly into the night, however, the next few years must become a time when the sector gets off the back foot. The direction of travel from the government has been to invest in innovation around colleges – in UTCs, for example – but not sufficiently in FE directly. The lens applied by the Chief Inspector is a schools lens. What has been identified as FE's greatest weakness should instead become its strength. Colleges cannot simply become a second go at school. They have to offer something very different. Some of the changes that we are seeing to the skills landscape may provide that opportunity at fresh definition. In this essay, I'll look to recent developments in the US that harness digital technologies and the untapped learning resources in cities for an example of how FE and skills might lead its own, localised transformation.

⁶³ Wilshaw, M. 2016. Ambitions for education. [speech]. 18 January, CentreForum, London. https://www.gov.uk/government/speeches/ambitions-for-educationsir-michael-wilshaw

Taking advantage of the changing context for FE and skills

There are three contextual factors that could provide some opportunity for re-focus and re-definition: devolution, consolidation and connection. A number of city (and non-city) deals are now in place to devolve the adult skills budget to regional and sub-regional authorities. These sub-regional authorities, expected to increase in number over the next few years, place colleges in closer proximity to funding, which has to provide hope for more consistency. Stability of investment, including multi-year deals wherever possible, could help with providing a more solid footing on which to consider the nature of provision going forward. This is something colleges will need to articulate firmly. Devolution can also offer new networks and political energy around the skills agenda. It is for colleges to show persuasive leadership to make this promise a reality.

Area reviews have caused controversy but the inevitable consolidations they precipitate might also provide opportunities. Larger colleges do not have to be more impersonal – local identity and provision will always be important. Mergers may, in time, free up resources as scale economies are realised, enabling investment in innovative forms of spreading learning and progression. If the area reviews get it right, then FE and skills infrastructure will be better mapped onto regional and sub-regional economic needs. There could be less duplication, greater quality and clearer pathways to achievement at higher levels.

Finally, the apprenticeship levy creates an opportunity for new connections with business. If there is insufficient innovation in apprenticeship product development then business may well conclude that it should create its own training supply chain. That would be an enormous missed opportunity for colleges. Assuming that the levy is not used as cover for a further major cut to the adult skills budget, then it could become a vehicle for a closer relationship between business, further and, indeed, higher education.

To present devolution, area reviews (consolidation), and the apprenticeship levy (connection) as opportunities rather than threats

may seem like putting a gloss on things. However, the bigger risk will come not from hopeful optimism but from institutional conservatism in the face of this changing landscape. Unless it fundamentally rethinks its proposition, FE and skills will continue to be portrayed as under-performing, and alternative vehicles for the country's skills needs will be sought out if conservatism is the widespread strategic approach by colleges. With greater imagination, a different approach could meet the needs of learners, employers and our cities and regions in an age that is increasingly characterised by the spread of digital technology. The rest of the chapter is devoted to outlining what such innovation could look like.

Digital learner engagement, rooted in the real world of our cities and regions

In The New Digital Learning Age report for the RSA, Louise Bamfield and I concluded that a very different approach was needed to link interestand passion-driven informal learning (that includes the growth of online learning channels such as YouTube, Khan Academy and Udacity) to more formal forms of learning and accreditation. We concluded that while current online learning systems catered well for the 11 per cent of the population (in a survey conducted by Populus) who are experiencing the digital revolution as 'confident creatives', it was failing to meet the self-identified needs of the majority. Key to more equitable outcomes will be the engagement of those who are 'held back' (20 per cent of the population) and the less identified needs of 'safety firsters' (30 per cent of the population). 'Held back' consider themselves to be creative but feel they lack support and access to finance and skills. 'Safety firsters' are not particularly engaged with learning, which in itself poses risks in the context of a changing landscape of work. In this context, what would a better system look like to meet a wider set of needs than those of the 'confident creatives'?

There have been many digital-led initiatives to widen and deepen learning. There has also been a series of place-led initiatives and efforts at developing area-based curricula. In our review of new approaches to expanding learning and promoting greater and more inclusive social mobility, one initiative, emerging in the US, seemed to enhance the potential of both by combining these strategies: the 'City Of Learning'. This project was launched as a pilot in 2013 by the mayor of Chicago, Rahm Emmanuel, to strengthen the city's identity as a setting for learning by galvanising its institutions, organisations and communities.

Cities of Learning – and there are now 12 – have sought to interface with existing institutions such as community colleges, schools, universities, museums, libraries and youth clubs, supporting engagement and extending their potential for impact on learner outcomes. Learners connect to the City of Learning (now termed 'LRNG Cities') through a curated digital platform that provides access to learning experiences online and offline, and combining those experiences to identify pathways of learning called 'playlists'. Once all the activities on a playlist are complete and learning has been demonstrated (and verified) then learners earn a digital open badge, an inter-operable recognition of learning that is increasingly being used in education and in business (as of mid-2015, two million open badges had been issued).

The key design features of Cities of Learning are leadership at city level (which could also be a non-city sub-region or county in the UK context), a strong network of education, commercial and political support for the initiative, and an open, curated and accessible city-wide digital platform linking to and providing learning opportunities. It works with, through and is driven by institutions such as colleges rather than competing with or seeking to replace them. Its focus is to develop learning experiences from passion/interest to more formal learning (helping to bring on board those safety firsters and held back learners) with the open badge serving as a pathway to further learning experiences. Essentially, Cities of Learning aim to connect an entire city as a network of learning. To take one city as an example, Dallas had 34,743 student accounts registered, 70 per cent of students served were economically disadvantaged and more than 200 partner organisations and institutions worked together to create a powerful learning network.

Could FE lead a 'city of learning'-type initiative in a UK city or region?

A scheme to help engage disaffected learners that ushers a reevaluation of the connections between learning and localities, that helps connect employers, learners and civic institutions, sits well with the sector's history. If the sector sees itself as enabled, rather than constrained by the context of the changing landscape described above, FE certainly has the potential to show the requisite leadership of such a scheme. The opportunities here are four-fold:

- Devolved governance creates a new setting through which colleges can become agitators for change rather than simply 'providers' delivering on the latest government priorities. But they will have to be able to articulate a convincing story of change around how to engage learners through concerted city/ regional action and more open, engaging platforms for learning. FE's knowledge of and commitment to the least engaged learners might inform the design of digital infrastructure. In the 'real' world, colleges could allow others access to their estate out of core hours to provide an extended range of learning experiences.
- Consolidation could free up resource for colleges to be part of a 'city of learning' style digital platform. They could be partners in the curation and promotion of city-wide learning opportunities.
- 3. FE content could form a core component of open learning 'pathways' in a given place with tutors encouraged to think beyond the classroom alone. There is also an opportunity to scale engagement across multiple locations and a much wider set of partners and communities.
- 4. Finally, the traineeship and apprenticeship frameworks and their expansion could provide a further spur to innovation. Colleges have the potential to embed open badges in learning activities. These activities are not simply about skills though these are, of course, important; they are also about characteristics and capabilities such as resilience, initiative, teamwork and persuasiveness. By embedding these skills and capabilities in established programmes of work, the

value can be articulated to employers. If colleges become expert in adapting badge frameworks to competencies and capabilities then their relationship with employers (and universities) could be deepened further. Colleges might even start to help companies adapt their frameworks beyond apprenticeships to badges as a wider way of capturing learning.

FE is a sector that has been battered and bruised by decades of centralist policy changes that have been a distraction from its key function in localities. Right now, the ideas outlined here may well seem impossible or overly hopeful of positive outcomes from this next wave of change. But there does, at last, seem to be some way to cast eyes towards a future beyond the next day; even if it would be churlish to suggest that turning the sector's gaze towards the longer term will be simple. In order to make that transition, however, the sector needs to create opportunities to re-establish itself in the public mind as an essential driver of a city's or region's dynamism and innovation. More open, place-based, mobilising learning initiatives such as Cities of Learning provide one such opportunity for thinking about the sector's value afresh. They are at least worthy of further reflection.

Response

Ann Limb

It is a barely disguised fact that further and adult education continue to take a place 'at the back of the queue' when it comes to post-referendum government education policy and innovation. The absence of the merest mention of professional and technical skills or adult learning in Theresa May's first major domestic policy speech on education since becoming Prime Minister served only to remind the college sector, training providers, adult educators and local authorities that lifelong learning is not at the forefront of the political thinking that is seeking to create 'a nation that works for everyone'.

Is it any wonder then that FE's 'damaged self-confidence', referred to in Anthony Painter's essay, might be further eroded by the (I believe) unwitting prime ministerial neglect of references to colleges and skills for life in the great British grammar school debate? That said, as Anthony's essay proposes, there is a possible way forward for the sector – which chimes with the optimistic view I have advocated throughout my own 40-year career in education, and also aligns with the view I take currently in my role as a local enterprise partnership (LEP) chair.

I agree with Anthony's basic proposition that localism combined with FE reform, the impact of the Sainsbury Review and the introduction of the apprenticeship levy all present huge opportunities for FE's leaders. Furthermore, his notion of harnessing this around an initiative like Cities of Learning (or, as I would prefer, 'communities of learning') is, I think, basically both sound and exciting. This is an idea whose time has come – and I believe that the most entrepreneurial FE leaders, LEPs and councils will seize the moment.

Here is why. I recently took part in a panel session at the LGA annual conference which discussed local government's role in education and skills. I was joined on the panel by the President of the Association of Colleges – and there was a marked similarity in our ideas. We both emphasised the importance of the local FE college and the role it has always played in its wider civic and business community – whether or not the college was part of or, as has been the case since 1993, separate from the local authority in which it is located. We both urged local government to work with LEPs and local FE colleges (as well as providers of adult learning and training) innovatively and collaboratively to meet the needs of the communities they represent.

Local authorities are the nation's pivotal and respected 'leaders of place'. FE colleges are the nation's established 'leaders of professional and technical skills'. Working together with businesses and community organisations, through combined authority structures and local enterprise partnerships, FE colleges and local authority leaders play a critical role in making sure the children, young people and adults they represent and serve, receive an educational experience that develops 'the whole person'. Every locality needs all its citizens to possess the skills, resilience, confidence, adaptability, creativity and courage to navigate a complex, interconnected, fast-moving world in which everyone has as much personal choice as is possible over their lives and careers. This is why I think the notion of 'cities of learning' has traction.

Even in a post-Brexit world of rising demand for services, combined with continued cutbacks in public resources, there are exciting – and enticing – opportunities for local leaders to continue to transform public service delivery through the creation of new relationships, the revision of business models, and the development of different ways of working with local partners.

National government has put in place four key policy drivers which can be deployed appropriately according to each local situation, local needs, and the stage of civic and political development. These are the

- repositioning of further education;
- reform of professional and technical education through apprenticeships and the Sainsbury review;
- reorganisation of local government;
- reorientation of the machinery of government following Brexit.

I believe that local authorities, working together with FE leaders and LEPs, have an opportunity to take the lead in harnessing the energies and ideas of all stakeholders, including local MPs, in determining a collective and practicable response to policy changes. Leaders of place are the people to bring their whole community together to agree the best way for their local area to take advantage of these levers for change. Cities of learning, as outlined in Anthony's essay, are a vehicle to achieve this.

I am currently the voluntary, independent Chair of the Doncaster Commission on Education and Skills, set up on behalf of the local strategic partnership, Team Doncaster, by the elected mayor and the chief executive of Doncaster Metropolitan Borough Council. The commission's role is to help the borough create a clear and focused strategic vision for education, skills and the local economy so that Doncaster can flourish now and in the future.

In our work over the last nine months, the commission has been encouraged by the amount of good will, energy, interest, commitment and good practice that exists across the largest metropolitan borough in England. Equally, we were struck by what one of the local head teachers told us early on in our enquiry that there is 'a lack of infrastructure for coordination' of ideas and practice across the borough. This is hardly surprising given the fragmentation of the education and skills system that has ensued from aspects of national government policy, but it is something that can be tackled through effective local leadership – something to which Doncaster, through the establishment of the commission, has clearly demonstrated it is open to developing. The commission's report will be published shortly and, coincidentally, our recommendations will reflect the underlying theme of both Anthony's essay and this response to it.

This is a time for local authorities and local FE colleges to push ahead with reform and to embrace digital technologies that can assist and accelerate this. Change requires hard work, the development of innovative ways of working with others across the community, finding solutions to the tough structural issues of governance, leadership, funding and accountability, and the forging of new relationships. Transformation is about building trust, managing ego needs, working collaboratively, working across political and executive boundaries, taking calculated risks, campaigning to bring everyone on side, taking advice from independent voices, and learning from best practice across this country and internationally – which is where the ideas outlined in Anthony's essay are illuminating and I believe helpful.

Above all, transformation takes leadership, time and 'being human'. You can't build a functioning 'place-wide' partnership overnight. If you want the whole to be more effective than each constituent part on its own, everyone has to be committed to developing, delivering and monitoring a 'pan-community change programme' around a single focused new idea. This can and, I believe, must be done if our local authorities are to fulfil their civic duties and if our FE colleges are to reinvent themselves in twenty-first century Britain. Anthony's essay points to a way forward for everyone.

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Paul Little is Principal and Chief Executive of City of Glasgow College and has led several other colleges in Scotland and Northern Ireland. Internationally, he has worked with the South African and Lithuanian governments and represented the UK at the fifteenth Commonwealth Ministers Summit and at the US Community Colleges Convention. What if further education colleges went for bold transformation instead of incremental change?

Paul Little

"Change is the law of life. And those who look only to the past or present are certain to miss the future." John F. Kennedy

In September 2010 the college landscape in Scotland was transformed dramatically when the first of a new breed of super colleges, City of Glasgow College, was successfully established from the pathfinder multi-college merger of three specialist colleges: Central College Glasgow, Glasgow Metropolitan College and Glasgow College of Nautical Studies.

The UK's third-largest city became home to a renaissance in college education. City of Glasgow College, originally occupying 11 legacy city sites, secured an unprecedented £200m in private-sector financing and 25 years of funding support from the Scottish government to create what is probably Europe's largest college campus. We number 40,000 students, including nearly 5,000 international students, 1,200 core staff and 2,500 learning programmes, with world-class ambitions. The Scottish college sector, largely insulated from the constant reform of its English counterpart, has successfully reinvented itself into a series of regional colleges with three multi-college regions, reduced the number of colleges from 43 to 26, and managed an unprecedented loss of nearly a third of its recurrent funding, the reprioritization of its curriculum to 16 to 24 year olds and reclassification to bring colleges clearly into the public sector.

In redefining a new era of Scottish college education and perhaps UK tertiary education, City of Glasgow College is not only unique in the sheer scale of its flagship campus, some ten times the size of any of the

city's hallowed football pitches, but also in the boldness of its strategic intent. It seeks ultimately to guarantee employability and prosperity for its diverse student cohort of some 130 different nationalities, given its partnerships with some 1,500 large and small employers. Scotland has a proud and ancient tradition of academic excellence boasting some of the oldest universities in the UK, yet its colleges have remained largely unseen and uncelebrated, despite their own rich 200-year tradition dating back to some of the earliest UK mechanics' institutes and useful places of learning for the common weal.

We should be celebrating our adaptive and resilient college institutions to help bring about a revaluation of the term 'college'. Diminishing respect has been exacerbated by the academic drift from the 1960s, the increasing politicisation of social mobility and a media dominated by university-educated graduates, but perhaps the tide is turning in the UK. We are entering a 'new normal' era of globalised geopolitical, financial and societal volatility, uncertainty, complexity and ambiguity (VUCA to borrow the military acronym that's made the transition to the mainstream), with the consequence that over this next 50 years, skilling, up-skilling and re-skilling with the latest technology will be more vital than ever. The once-in-a-lifetime opportunity we were given through merger inspired us to rethink the traditional FE business model. Preferring to take the long view, unshackled from a fixation on the urgent, we have planned a super college that is future-proofed for the next 50 years, through a combination of meticulous design, and increasing global partnership and collaboration. Ours is indeed an ambitious educational adventure secured despite the greatest recession in our memory.

Inspiration, excellence and innovation

Dame Ruth Silver notes in her foreword to A *Blueprint for Fairness: The Final Report of the Commission on Widening Access* (2016) that: 'Access is a whole system problem and it will require system wide change to solve it.' It's ironic that some 20 years on from the Dearing Report and the associated Garrick Report in Scotland, the same recommendations for colleges to promote access through degree programmes and articulation routes into universities are still being made. Previous periods of college renaissance in Scotland have led to degree-awarding central colleges becoming universities (Abertay, Glasgow Caledonian, Napier, Paisley [now the University of the West of Scotland] and Robert Gordon) or seen the HE capacity of college consortia consolidated into the single entity that is the University of the Highlands and Islands.

City of Glasgow College, however, remains steadfast in its desire to remain a college even though 60 per cent of its funded provision remains at higher education level. While widening access to higher education is an increasingly important dimension of educational policy for securing social mobility and social justice, we feel better placed to respond to this need by remaining a college. We have a history of attracting some of the most disadvantaged learners in our community and in enrolling or articulating students on HE courses. As impossible as it may appear at first, City of Glasgow College is now, according to Scottish government statistics (December 2015), the third most popular destination for school leavers in Scotland going into HE, while 24 per cent of our students live in the most deprived 10 per cent of postcodes.

It is frustrating at times when our politicians or policymakers stand up and say that we have world-class higher education in Scotland, yet rarely mention that a large chunk of this is actually delivered in colleges, and our crucial access role. Creating a super college has drawn the attention of leading civic, political, industrial and media figures to the full continuum of the Scottish tertiary sector, recognising it as multi-layered, personalised and globally connected and not a one-size-fits-all solution. Professor Anton Muscatelli, Vice Chancellor of Glasgow University, said at a recent City of Glasgow College graduation ceremony:

The development of the City and Riverside campuses is an achievement to be very proud of. It's not just good for the college sector and a timely statement of ambition and intent; it's good for the city of Glasgow and for the future generations who look to develop themselves through education. Our education and skills training offering is structured fundamentally around individual students' needs, aptitudes and aspirations. We are developing our 'career college' or Industry Academy approach that offers a demand- and employer-led vocational curriculum alongside a core academic curriculum, underpinned by seamless student support. We secure industry involvement in the design, development and delivery of the curriculum, encouraging employers to support students' development of core and technical skills as well as the values and behaviours they are looking for in their employees. We work in real-time partnership with industry and commerce to give our students career-enhancing insights, industry-standard project briefs and tailored professional placements. This approach gives our students a competitive edge in getting and keeping a job and improves their prospects of getting an even better job.⁶⁵

Building relationships with industry in this way requires investment in technology at a scale that has only been made possible by the scale of the college post-merger alongside a pro-risk attitude. As an example, we have invested in a new \pm 70m purpose-built maritime education and training campus (Riverside), home to 2,000 marine and engineering cadets and senior officers on Red Ensigns programmes. We invested significantly in state-of-the-art bridge- and engine-simulation technology, some five years ahead of anything available in industry, and we have the UK's first 360-degree simulator and working ship's engine, operational 24/7.

Our commitment to innovation and investment in the capital resource of the college extends across our £228m campus, facilitating a disruptive renaissance in tertiary education to meet the changing demands of our students and of industry. Leaving outdated Victorian and post-industrial buildings in Glasgow's metropolitan centre for a new, more coherent campus brings huge new efficiencies and many other, less tangible benefits. Curriculum adjacencies spark off new synergies; centralised scheduling and space optimisation have allowed 'new possibilities' to emerge: roof gardens provide city-centre green space which will be cultivated by our students; our Creative Industry Tower enables the integration of different curriculum pathways. The 5,000 visitors we have

⁶⁵ 84 per cent of students progressed to a job or full-time further study in 2014-15.

welcomed since we opened phase one of our new super campus barely five months ago, enter an intelligent building, technologically rich with a thin client capacity to enable all students to bring their own devices.

No leadership without learning

At City of Glasgow College I want inspiration, excellence and innovation to be our new norm. I often say to my senior managers that their job is not to manage the inevitable, but to achieve the improbable. Our commitment to excellence extends beyond narrow frameworks for accountability. Together as a purposeful staff team – 'Team City' – we have taken a below-average college and made it one of the highestranking colleges in the Scottish sector for student attainment. Our Project Search training programme for young adults with learning challenges and/or autism condition helped 75 per cent of participants to secure employment, with the remaining number taking part in a three-year support system with a job coach. We encourage our students to enter skills competitions such as WorldSkills to give them the best national and international benchmarks for their particular standard of technical or professional proficiency and we are now the number one college in the UK for WorldSkills and seek to be the best in Europe through the European Excellence Award.

We have certainly not allowed the traditionalists, the policymakers or ideologues, or our geography, to determine our own or our students' destiny. We have instead developed our skill of prescience and actively looked at what might happen in the future as a basis for creating our own opportunity. Since merger, the college has had glowing endorsement from a wide range of regulators and quality assessors. The most recent inspection report from Education Scotland highlights our positive corporate culture, our determined focus on student engagement and attainment, and our excellent student support services.

Transformational change

Each of the three legacy colleges which merged to form City of Glasgow College served its students and Glasgow well for many years.

But the reality facing us all is that the demands of students and lecturers alike in the twenty-first century have changed beyond all recognition since the 1960s when these colleges with their 11 buildings across six sites first became part of the city landscape.

Mergers are very complex programmes of cultural change, far easier to conceive than they are to deliver. The grand plans hatched in boardrooms must ultimately win hearts and minds. Mergers are certainly not a one-size-fits-all quick-fix solution, rather a best-fit solution arrived at after weighing up present and future organisational challenges. Successful mergers require a compelling vision, exceptional leadership and infinite resilience.

Within a college context, if deciding whether merger or other significant structural changes are the best option, it is always essential to start with the students and have clearly defined and articulated educational benefits. Otherwise, don't bother. The benefits and advances that students are seeing at City of Glasgow College could not have been realised by the legacy institutions remaining on their own or indeed in the buildings in which each was housed.

Our success was never inevitable. We worked extremely hard to make it happen. Firmly committed to the possibility of the college as a world-class institution in outlook, performance and approach, we dared to be different, we dared to lead, we dared to innovate to redefine, to be a catalyst for transformational rather than incremental change. We committed to being a beacon of technical and professional excellence for the UK and beyond. All are welcome to visit our next-generation college to experience the new possible, for what we have achieved collectively is not just for us, for Glasgow or even for Scotland. We want others in the rest of the UK to realise their own new possibilities.

"... It's a sort of splendid torch I have hold of for the moment and I want to make it burn as brightly as possible before handing it on to future generations." George Bernard Shaw

Response

I welcome the contribution of the *Possibility Thinking* essays and the debate which they will hopefully engender. If the sector is to become 'stronger, more self-assured and better prepared to tackle the challenges ahead', to quote the original report, as leaders we need to ensure we find the time to think, reflect and look to the future.

Paul's essay invites us to make comparisons between the English and Scottish systems and it raises a number of questions for us to reflect on. Are English colleges bold enough? Are there lessons we can learn from our Scottish cousins? Does size matter, especially as a key factor in driving success? It is clear that while our aims and ambitions are well aligned and there are similarities between our systems, there are also some notable differences.

Paul's essay is a particularly timely contribution with area-based reviews, the reform of technical education and a new post-16 skills plan upon us. Together, they provide an opportunity for English colleges to envision the future and take our destiny into our own hands.

The impact of the area-based reviews in England will undoubtedly be fewer, larger and, hopefully, more financially resilient colleges. Recent publications from the Department for Business, Innovation and Skills tell us that the current technical education system in England is producing steady improvements but that this alone is not enough to help to tackle the productivity problem facing the UK economy. These, alongside the report from the panel on technical education chaired by David Sainsbury,⁶⁶ perhaps provide us with better conditions for bold, transformational change than we have seen since incorporation in 1993.

The opportunities presented to City of Glasgow College by the Scottish national change programme and the substantial capital investment that

⁶⁶ Department for Education; Department for Business, Innovation and Skills. 2016. *Report of the Independent Panel on Technical Education.*

it was able to secure presented the opportunity to be bold and to do something different. I have visited City of Glasgow College. It is indeed impressive and does provide a blueprint for transformation. However, as industry and technology both change so quickly, it is an ambitious claim to have future-proofed a building for 50 years. The advantages of concentrating provision in such a big way also need to be balanced against the risk of drawing activity away from places, deep in the community, where learning is still acutely needed. There is no doubt that 25 years of funding support from the Scottish government provides the stability within which they are able to plan strategically for the future. This is something that we in England could only dream of and makes our ambitions for three-year funding pale into insignificance.

As Paul states, the Scottish system has been largely insulated from the constant reforms which we have endured in England. However, the system has not been without its challenges. Mergers are complicated and take a long time to fully embed and are not, therefore, a quick fix. It is also important to assess the impact of efficiency measures and reorganisations. Reports such as Audit Scotland's would suggest they can lead to fewer over-24s, women and part-time students accessing education and training. Therefore, the right balance needs to be reached between filling up new, modern buildings and establishing effective relationships with employers to deliver in industry. The emphasis on achieving three million apprenticeships is particularly crucial. Moreover, by exploiting advances in digital and online technology, we can continue to deliver to the wider community and champion inclusive learning for all.

In reaching for transformation, we need to be aware that rationalisation and regionalisation can also lead to increased levels of governance, a tendency for over-planning, increasing bureaucracy and loss of autonomy. These can all make taking bold and brave decisions far more difficult.

Yet, despite our many challenges, English colleges have achieved much to be proud of and can achieve much more with optimism, bold ambition and the right level of funding and support. Paul talks about 'the revaluation of the word "college" alongside his 'steadfast desire to remain a college'. This shows both confidence in the future and a belief in our mission, highlighting the vital part we play not only in skills development but also in promoting social mobility and social justice.

It is encouraging to hear that the reputation of Scottish colleges, which 'remained largely unseen and uncelebrated', is now changing as 'the new breed of super colleges' gain more influence and visibility. Early feedback from the area-based review process indicates that it is being effective in establishing stronger relationships with key stakeholders, which can hopefully be built on once the area review roadshow has left town. Although many individual English colleges have extremely strong relationships with employers, there is still work to be done in securing a lasting sector-wide reputation as the go-to place for skills training.

Paul talks of an offer which is 'structured around individual student needs' and their 'Industry Academy approach' both of which are to be celebrated and encouraged and is the way the best of English colleges already work. We need to reflect on whether the English policy drivers and the Ofsted regime are potentially hampering this approach. We should question whether the current policy environment encourages a bold, pro-risk approach from English colleges. We need to create the right environment to support the development of an industry-focused, high-quality education and training offer.

English colleges have always been flexible, adaptable and, often, transformational. Self-belief coupled with ambitious aims and high expectations, of ourselves and our students, are all essential if we are to deliver the strong, bold and optimistic college sector that our students deserve. We should set our sights firmly on the future and choose to be optimistic.

Sue Rimmer OBE has been Principal and Chief Executive of South Thames College for more than 12 years. She has worked in the further education sector for more than 30 years and was awarded an OBE in the 2011 New Years Honours list for services to further education.

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