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Education in an uncertain future: Two scenarios

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Abstract

This article examines two scenarios for the future of education over the coming decades, mainly in England but also in comparable countries. It does so against the background of six large-scale historical processes now in progress: increasing longevity, the expansion of the internet, changes in work patterns, climate change, the rise in inequality and the coming of populism. Scenario 1 continues current patterns in general politics and education, while Scenario 2 radically diverges from them. Over half the article is devoted to the future of education in Scenario 2.

Keywords: climate change, work patterns, equality, assessment, lifelong education

This article looks at the future of education in long-term perspective. Its focus is often on England, but, local applications apart, much of its argument is relevant to other countries, not least those comparable to the UK in wealth and political arrangements.

Around the end of the twentieth century and beginning of the twenty-first, fast-moving political, economic and social developments have aroused interest in the future of education, both locally and globally. Education policymaking at both levels has been obliged to reflect often massive changes already under way and on the horizon.

A global example is UNESCO's *Learning: The treasure within*, the so-called Delors Report on 'education for the twenty-first century' (UNESCO, 1996). Written in the aftermath of the fall of the Soviet Union, it was cautiously optimistic about the progress of democracy across the world, as well as worldwide interdependence and globalization. While aware of the danger of an increasing split between a minority able to navigate this new world and a majority who feel at the mercy of events, it looked forward to further scientific advances that could be of benefit to all, as well as to educational progress built not only around the acquisition of knowledge, but also around cooperation and teamwork, personal fulfilment and lifelong learning.

From the same decade, Brian Simon's essay 'What future for education?', in his book of the same title (Simon, 1992), was specifically about England and narrower in scope. Its focus was on problems with the shift towards a free market in education under Margaret Thatcher and John Major, and on the merits of the opposing notion of education as a public good. Simon (*ibid.*: 116) suggested that 'we might be ... poised for a new break-through' in favour of the latter, comparable to the great educational advances of the 1960s.

In the UK, the optimism of the 1990s was reinforced a decade later by enthusiasm for the educational benefits of digital technologies. This had been a minor theme in Chapter 8 of the 1996 UNESCO report – not surprisingly, since the world wide web as we know it was then only three years old. But by 2007, with not only the web but

also the mobile phone now in wide use, the future impact of IT on education was a topic of growing interest. This is clear from the National Foundation for Educational Research report, *2020 and Beyond: Future scenarios for education in the age of new technologies* (Daanen and Facer, 2007). Despite its prediction that by 2020 there would be less factual recall in the curriculum and mobile phones would be replaced by devices embedded in our keys, clothes, shoes and other objects, it was closer to the mark in discussing the educational impact on writing, the use of books and libraries, and issues of children's security.

The optimism of the 1990s and 2000s has been replaced in more recent years by darker fears about the future. At the global level, this is clear from the report, *The Future of Education and Skills: Education 2030* (OECD, 2018). Among other things, it highlights: climate change and the depletion of natural resources; cyber security; the growth of population; and widening inequalities in living standards and life chances. It states: 'conflict, instability and inertia, often intertwined with populist politics, are eroding trust and confidence in government itself. At the same time, the threats of war and terrorism are escalating' (ibid.: 3). Education must be designed so as to help learners to understand and contribute to tackling such problems, and must aim at individual and collective well-being. Basic numeracy and literacy, including data literacy, remain essential, as do the acquisition of disciplinary and practical knowledge. Curriculum overload should yield to 'quality learning time' centred on personalized and collaborative learning.

The present article, like the OECD report, takes account of the dystopian tendencies in our rapidly changing world, as well as its potential to further personal flourishing in an equitable way. The future of education in England is its central concern, but many of the points it makes will find echoes in other countries. It sketches two radically different scenarios in light of six large-scale historical processes currently under way, some of which have already been mentioned. All these processes can reasonably be expected to continue into the coming decades, unless political or other action in some cases prevents this.

The first is *increasing longevity*. Owing largely to improvements in health, life expectancy has doubled in England and Wales since the mid-nineteenth century: 'A newborn boy was expected to live to 40.2 in 1841, compared to 79.0 in 2011, whereas a baby girl was expected to live to 42.2 in 1841 and 82.8 in 2011' (ONS, 2015: n.p.). In a wider geographical framework, 'a child born in the west today has a more than 50% chance of living to over 105, while by contrast, a child born over a century ago had a less than 1% chance of living to that age' (Gratton and Scott, 2016: 2).

Since the end of the twentieth century, the *expansion of the internet* has led to massive changes in the ways we communicate, work, shop, acquire news and other information, pursue social relationships and are entertained. At the same time, people have become increasingly aware of its misuse in personal bullying, criminal activity, cyberattacks by foreign powers, increasing surveillance of people's lives and threats from political extremists.

Changes in work patterns are also under way. Despite differences of opinion about the amount by which automation is likely to affect the number of jobs available, there is wide consensus that those occupations most at risk are those that can most easily be taken over by machines, such as waiters and waitresses, shelf fillers and elementary sales occupations. Occupations dependent on creative thinking and the exercise of judgement, such as medical practitioners and those in other professions, are at the lowest risk (ONS, 2019).

The fourth process is *climate change*. Its deniers apart, there is now wide consensus that unless urgent action is taken, nationally and globally, to reduce carbon dioxide and methane emissions caused, for instance, by vehicles, air travel, deforestation and meat farming, the world is likely to get hotter, sea levels will rise and extreme weather conditions such as storms, floods and droughts will become more frequent.

The fifth process is a *rise in inequality*. According to recent research, reductions in social inequality in Britain, as in some other countries, between 1945 and the 1970s have since then reversed, with an increasing gap between the income and wealth of richer people and those of the poor (Piketty, 2014: 200, 344). This is connected with a rise in neo-liberalist policies in favour of a shrinking state sector, tax reductions for the better off and a worsening of social welfare provision.

Finally, there is the *coming of populism*. Especially since 2015, there has been a global increase in extreme right-wing political activity and in disillusionment with conventional forms of parliamentary democracy. This has become evident in the rise of populist leaders in citadels of democracy such as the USA and the UK, in self-styled democratic regimes such as those in Russia, Hungary, Turkey, India and Brazil, and in intermediate cases such as Italy, Bulgaria and Poland. How far this poses a more general threat to the survival of liberal democracy is not yet clear.

These six processes interconnect. Increasing longevity means most people will be fitter and more active for longer, adding to the pool of employable labour and further reducing the number of jobs available. The expansion of the internet affects work patterns and their susceptibility to automation, increases awareness of climate change and is used by populists to spread propaganda and disinformation. Increasingly wealthy elites want to transmit their wealth and other advantages to the next generation, and so try to ensure that these secure the most sought-after jobs. Many rich people have an interest in maximizing profits by keeping gross domestic product (GDP) as high as possible. The depletion of the Earth's resources, the continued reliance on fossil fuels and the use of plastic that a high GDP is likely to bring with it will speed the rate and extent of climate change. Populist political movements are often allied with powerful elites interested in manipulating democratic mechanisms such as national elections to keep their wealth and privileges intact.

In the light of these six interconnected processes, how might educational provision be affected in the future? The latter is always uncertain, although, as I suggested above, we have good grounds to expect all six processes to persist for some considerable time, unless checked by, for instance, political action. Against this background, two scenarios suggest themselves. These are in line with the two main opposing political tendencies found in the UK and comparable countries in recent decades, and they lie at opposite poles of a spectrum of possibilities between them. Given all the considerations in play, there are many facets to these scenarios, and it would require a monograph rather than a journal article to explore them fully. I have done something to lessen this difficulty by referring the reader to a number of texts that provide further support for the claims being made.

Scenario 1

The general picture

This scenario continues the economic and social status quo created over the past 40 years. A version of capitalism that creates insatiable wants will continue to dominate (Skidelsky and Skidelsky, 2012: 40–2, 183–4). When John Maynard Keynes (1931) wrote about capitalism nearly a century ago, he saw it as helping to meet people's needs

and lead a flourishing life. Regarding employment, for instance, he envisaged in his celebrated essay 'Economic possibilities for our grandchildren' (written in 1930) that by 2030 the working week would have shrunk to around fifteen hours. What he did *not* envisage, according to Skidelsky and Skidelsky (2012: ix–xi), is that growth would be foregrounded for its own sake, with ever-rising GDP seen as the criterion of economic success, and with an increase in the power of the financial sector over the economy. This has been the direction of capitalism since Margaret Thatcher and Ronald Reagan in the 1980s, and in Scenario 1 it will continue at full tilt.

This will mean further accumulation of income and wealth on the part of the very rich, as well as even more ingenious ways of persuading people to buy clothes and other goods and services so as to maximize profits. These are likely to include using social media and other online devices to keep individuals' lifestyles and day-to-day activities under close surveillance so that they can become the objects of precision-targeted advertising (Zuboff, 2019).

Keynes's (1931) hopes for his generation's grandchildren will be dashed as employers' interests in getting the most out of their workforce will keep hours long and wages low for full-time workers. It will also be in their interests to use automation where possible so as to keep down labour costs. This will lead to increasing competition for the smaller amount of work available, as well as the further growth of a 'precarariat' willing to put up with zero-hours contracts and the need to take on several jobs to make ends meet.

Worsening welfare provision under a small-state, neo-liberal regime will subject many of those unable to find steady, or indeed any, employment to financial hardship. Increased longevity will make this worse, and will add to the pool of competitors for whatever work is going. Working conditions, which have for several decades suffered from the neo-liberal undermining of trade union power, will remain unchecked under what Elizabeth Anderson (2017) has called the authoritarian 'private government' of employers.

Although technological innovations may (or may not) diminish the reliance on fossil fuels and the use of plastic noted above as expeditors of climate change, the insatiable pursuit of growth is likely to make this hard to avoid.

Finally, we can expect that the elite's interest in maintaining the political power it has enjoyed for most of the last century in Britain, the USA and elsewhere will lead it to exploit the potentialities of the internet, and of the 'surveillance capitalism' (in Zuboff's (2019) term) that it facilitates, to try to ensure election success through political messages targeted to individual voters and, more generally, through populist propaganda and misinformation. This will help to undermine democratic government by preserving its form but destroying its spirit (Runciman, 2018). There may in time be little to prevent political elites, in Britain and across the world, from jettisoning democratic procedures altogether and embracing overt authoritarianism. These elites will become more closely bonded together internationally in protection of their common interest in holding on to power and wealth.

Implications for education

What will this mean for education? With some adaptations, in England the system is well-suited to facilitate the developments outlined above. It includes expensive private schooling for the rich, leading to good examination results and acceptance rates at top universities, as well as to the domination of top professions out of all proportion to their tiny numbers (Green and Kynaston, 2019: 4). Examination success apart, private schools will also continue to provide not only a wide range of activities

as part of a broad education enabling individuals to lead flourishing lives of their own choosing, but also the social networks and dispositions of character, such as self-confidence and leadership qualities, which will cement their position within the elite. The internationalization of elites mentioned above will be furthered by the growing number of students studying at schools and universities in other countries. British universities and private schools are already a magnet for wealthy young people from Asia and elsewhere, and we may expect to see their drawing power increase.

The most affluent will continue to need able, highly qualified lieutenants beyond their own ranks to staff leading positions in the economy. This points to the retention of something like the present examination system as the route to a university education or high-end further education (FE) for the most ambitious state-school students, especially those in more privileged schools. One can expect them to aim at better-paid jobs that are less susceptible to automation and more dependent on judgement and creativity. Although this may in time lead to more teaching of non-STEM (science, technology, engineering and mathematics) subjects, the instrumental, exam-dominated, character of state education will intensify. Since jobs at the lower end do not depend on a high level of specialized knowledge, there will be little incentive for ruling groups to provide more than a basic, uncostly education for many young people. FE and adult education, as well as youth facilities, will continue to decline for the same reason.

As long as at least the outward signs of political democracy are preserved, ruling groups will, as now, underline that the education system delivers 'equality of opportunity' – suggesting that anyone, from any social background, can get to university and gain a top job. The vehicle for this, as now, will be a common examination for all school leavers, including private school students. The boundary between state and private schooling will be blurred by a further extension of the semi-privatized academy system – driven by neo-liberal thinking – within the state structure. The policy of 'equality of opportunity' within an alleged common system of schools and examinations helps the ruling elite in two ways: by providing highly qualified lieutenants, and by throwing an egalitarian-seeming smokescreen over an unfair system that sees educational activity as a race for scarce life-goods, where winners are rewarded and the large number of losers are relatively neglected.

Scenario 2

The general picture

Scenario 2 will be a society based not on 'equality of opportunity' as described above, but on two more defensible alternatives.

The first is a very different kind of equality: democratic equality, or equality of respect (Anderson, 1999). Whereas Scenario 1 society celebrates hierarchy, with those at the top caring little for the interests of those far beneath them, while often expecting their attention, envy or adulation, Scenario 2 is built around the value of treating other people as equals, entailing a common concern that everyone is able to lead a flourishing life of their own choosing. This is incompatible with gross economic inequality.

The second, embedded in the first, is that everyone should have *sufficient* goods for them to lead this flourishing life (White, 1994). This will require a massive redistribution of wealth and income away from the rich and in favour of the worse off. In this way, society will become *more* equal than today. Greater equality in goods such as income, wealth, housing, education, autonomy and health benefits will thus be a necessary condition for sufficiency in such goods (as well as for equality of respect), but

the pursuit of equality in the abstract, as an intrinsic good, has nothing to recommend it – for we could all be equal in poverty, poor health and jobs with crippling long hours.

In this society, the thrust of capitalism will no longer be toward unbridled growth but toward promoting well-being. Shareholders and executives in the capitalist economy will be rewarded for their contribution to this, but, owing to high rates of taxation on income and property, as well as inheritance taxes, they will no longer receive the huge income and wealth that many enjoy today (see Chapter 7 in Atkinson, 2015). They will work with state institutions to see that everyone has adequate income, housing, food and drink, clothing, education, free time, resources to pursue interests and relationships of their own choosing, health provision and working conditions. In each of these cases, the criterion of adequacy is what is necessary not just to survive, but to lead a full and fruitful life.

Over the last century, market and state agencies have done much to reach these targets, at least for many people. They live immeasurably more comfortably. They have enough to eat and drink, are well clothed, adequately housed, well stocked with household goods, have free access to good, if improvable, health facilities and – thanks to radio, television and the internet – have easy access to whatever information, entertainment and cultural resources that they might need or want. How far their pre-school, school and later education is always adequate is something that we will turn to shortly. Enough free time to pursue valued activities and relationships is still a problem in a society such as our own where those in full-time employment work on average 42 hours a week – the highest in the EU, often with long commuting times to be added to this (TUC, 2019). We are far from Keynes's (1931) vision of a short working week by 2030.

So much for the many. Despite great national wealth, there are still millions of British people, as well as those from other countries, who fall short of adequacy in most dimensions. While free marketeers have left them to fend for themselves with minimum state support, state and private enterprise will work together to rectify this.

In Scenario 2, a flourishing life for all will for the first time be realizable. This will be partly because of increased longevity, changes in employment, reactions to climate change and 'prioritizing information-rich technologies towards solving major social challenges, such as ill-health, welfare dependency, sexual exploitation and poor education' (Mason, 2015: 269).

Climate change will require global cooperation. We will have to pay more attention to the goods we buy. This means using fewer of the Earth's resources; relying less on fossil fuels, meat products and plastic packaging; and recycling where we can. We will have to resist the urgings of advertisements to buy more goods and services than we need. This will reduce economic activity and the amount of employment needed to sustain it. It will also lead us to take more seriously the case for a more frugal lifestyle – a point taken up again when we look at education below.

Further reductions in employment will come through automation, the decline of limitless capitalism, and increased longevity: if most people live to at least 100, and are physically and mentally fit into their 80s, many will be able and want to work much longer than traditionally. Some of these, often in internet-based employment, will be able to work from home for some or all of their time, thus gaining more autonomy over when they work. On the principle of equality of respect, the lower amount of paid work available will be spread more equitably across the community, in time making a working week closer to Keynes's (1931) ideal of 15 hours a possibility.

Since some people will not find fulfilment in paid work, there is a case for spreading less-desirable forms of it across the population, perhaps through some form of short-term national service. There is likewise a case for limited-term engagement

in the most fulfilling jobs, so that more people can benefit from these. All jobs will be adequately rewarded – the least sought after more substantially than many others.

Those unemployed, unable to work for reasons of health, age or childcare, and perhaps those disinclined for the moment to seek employment at all, could receive a generous universal basic income. As an alternative to universal basic income, Atkinson (2015: 218–20) has suggested a ‘participation income’, conditional on some kind of social contribution in the shape of caring for the very young or frail elderly, or engaging in education, training or voluntary work.

Given the importance of autonomy in decisions about how to live, there is a case for pressing forward with schemes for increased worker participation in the running of workplaces (Anderson, 2017: 69–71). The move away from insatiable capitalism towards stakeholder capitalism will see employers and shareholders doing more to improve working conditions.

There is much more one could say about other features of this scenario, such as about relations with the rest of the international community, including help for poorer parts of the world to enjoy lives of well-being. But perhaps this sketch is enough to provide background for a discussion of educational arrangements in Scenario 2.

Implications for education

Lengthening lifespans

Characteristic of educational arrangements today is the virtually total focus on children and young people in the first two decades of life. This has been the pattern in Britain since the late nineteenth century, when a national education system (incorporating private as well as state schools) was created. In 1871, when life expectancy for a newborn was 43 years on average (ONS, 2015), and when ordinary people were expected to work long hours or bring up their large families from their mid-teens onwards, it is hard to see how the pattern could have been very different. But now people live nearly twice as long. In 2011, average life expectancy in the UK was 81 (ONS, 2015), and in 2016 it was calculated that one in three of today’s babies would live to see their hundredth birthday (ONS, 2016). Given that this trend continues, we can expect that in the future most people will have 60, 70 or even 80 years of life beyond the first two decades, in which their education is now still concentrated. This raises the questions: how far should we still persist with this front-loading, and how far should we spread education out across individuals’ lifespans?

Early upbringing and parent–teacher collaboration

Education in its broad sense includes a young child’s upbringing. It must cover their initiation into a community of language users, their early moral and aesthetic formation, their developing practical competences and, on the more strictly intellectual side, their growing understanding of themselves, other people, and the natural and human worlds in which they come to live.

In Scenario 2, parents and teachers will most likely be working together more closely. They will see themselves as jointly responsible for these different aspects of upbringing. This means that parents will have a fuller understanding of education and its underlying aims than many of them do now. At the heart of family life will still be the spontaneity of loving and caring relationships. As children grow older and enter the more formal worlds of nursery, primary and secondary school, the educational roles of parents and teachers will become more closely intertwined. At present, such coordination is often difficult. The traditional idea that home and school belong to

different spheres is hard to shift. In addition, many parents, as well as teachers, have too little time in a busy working week to interact.

In Scenario 2, collaboration will be easier. As the volume of paid work decreases, parents will have more time to be at home with their children, liaise with teachers and perhaps observe and help with lessons. They will also, over time, become better educated than some are now, and more able to see their role in wider perspective. They will use increasingly sophisticated digital resources, not only in developing children's practical and intellectual abilities, but also in communication with their teachers and school authorities.

Central to this communication will be shared record keeping. Teachers will need to see their work against the wider background of how far children at home have developed in personality, and made progress in linguistic ability, moral awareness, practical competences and understanding of the world. Parents will keep more informal accounts of these things, updatable via the internet, and share these with teachers. As is already the practice in some pioneering schools, in return, teachers will share the child's profile of achievements at school, both digitally and in frequent face-to-face meetings (White, 2014: 54). As they grow older, children too will contribute in both of these ways to an expanding portfolio based on these records.

Beyond early upbringing

Even in a hundred-year life, there are limits to how far we can dispense with educational front-loading: some learning can only take place in the early years, whether at home or school. Is more front-loading unavoidable beyond the age of 11 or 12? It would appear so, but the notion we now have of secondary education will surely change. Despite official aims to do with autonomy and responsible citizenship, it is currently dominated by the drive for good examination results, especially in STEM subjects. Both the aims and the reality are in tune with the traditional view that education is focused on preparation for life, not least work.

Scenario 2 will bring greater clarity. In the preparation for life view, a great deal has to be packed into a short time: nothing of importance can be left out, and demands of both breadth and depth have to be respected. But once we remind ourselves that students have 60–80, rather than 20, years ahead of them, we may well want to think again about whether schools' programmes have to be so crammed.

Effects of changes in work and leisure

This is especially so, given the changes in work and leisure patterns envisaged in Scenario 2. As things are now, secondary school students are expected to study hard to pass exams in a range of subjects, so as to go on to FE and higher education and get a 'good' job. But for some, with working hours falling in time to around, say, 20 or so hours a week, and with adequate pay in all jobs, the sort of work they do may become less important – especially if there is some kind of national service for the least wanted jobs. They will know, too, that if, for instance, they take an 'ordinary' job early on and later want to become a doctor, they will have plenty of time to study for this in their 20s, 30s, 40s or later.

As work becomes less central, people are less likely to be in thrall to the long-ingrained belief that unremitting hard work is a virtue and idleness a sin. A more balanced attitude will take its place. We need sufficient goods and services for all to lead a flourishing life. Paid work is necessary for this, but not beyond it. The more laid-back attitude to work will be very different from the virtue of diligence in the traditional work ethic.

Nowhere is this ethic so marked than in secondary schooling today, with its students urged to work hard for exam successes and their rewards. Closely connected with the work ethic is the idea of *life planning* – deciding what one wants to be doing x years ahead and working towards this. It is a conception that the exam and ‘good’ job regime encourages, but it is not an indispensable feature of a flourishing life (White, 2011: 74–6). Some people prefer to take life as it comes and not have to face the disappointments that life planning can bring. Scenario 2 will facilitate this more laid-back attitude to life for those so inclined.

As the work ethic begins to lose its hold, teachers will be less concerned that students master as much as they can in a short time, and will focus more on the enjoyability and worthwhileness of their learning, however long this takes them. The ‘slow education’ that some advocate today is a harbinger of this new educational world (Wilby, 2019).

We can also learn from one of the more attractive features of schooling found in the former Soviet Union. With schooling lasting only half a day, students were free to attend Young Pioneer Houses or Pioneer Palaces. Here they could choose from a range of activities – from playing an instrument to practical chemistry to looking after pets (White, 1973: 70). We would not wish to copy the indoctrinatory add-ons of this system, but could well create similar large spaces for voluntary pursuits, either in the school or in another, tailor-made, institution. This would go far beyond the after-school club, and would mean a reduction in the time allotted to the compulsory element of schooling.

The end of the exam bottleneck

The exam bottleneck that most are expected to pass through between the ages of 16 and 18 will no longer exist in the less pressurized world of Scenario 2. (On the significance of bottlenecks, not least for the testing regime, see Fishkin (2014: 149–54), and elsewhere.) Exams will not wholly disappear. Music exams, for instance, might still have a place, along with other tests of practical skills. What about exams that test theoretical knowledge? Most students today take these. They are part of the bottleneck and contribute to its downsides – for example, exam anxiety and the effects of failure on life chances and job chances. But as the bottleneck will no longer exist, there is no reason why students should not take exams in them if that is what they want to do. Whether we will still need today’s apparatus of national exam boards is a further question. It is part of the bottleneck and may have no role outside it. School-administered exams may well be better.

Although exams are likely to have a residual presence in Scenario 2, they will no longer be the main means by which students’ achievements are recorded. Exam successes will in fact be one of the items recorded in the ‘expanding portfolio’ discussed above (see Chapter 3 in White, 2014). This will begin in nursery or primary school and continue at least to the end of secondary education – slimmed down at intervals as it becomes too full. It will cover academic achievements, as well as civic and moral development and other interests and experiences inside and outside school, and its digital form will allow pictorial as well as textual material. It will be monitored by school authorities – with outside oversight – to ensure that it is as objective as possible.

It may seem odd to begin this account of secondary schooling with a discussion of exams and other forms of assessment: readers might have expected the curriculum to come first and assessment second. My reason has been to clear the ground. It is hard for any of us today to think about secondary education outside an exam-dominated framework. This needs to be put on one side to leave us free to envisage other possibilities.

The school curriculum

That said, it is now time to look more closely at curriculum arrangements. The present school curriculum is built around separate subjects, each taught over a number of years; but we should not assume this will be true of Scenario 2. School subjects are, after all, only one kind of *vehicle* to help realize educational aims – a vehicle especially suited to an exam-focused regime. There are many others: projects; interdisciplinary activities; discussion of personal and civic matters; classroom interaction; school ethos; whole-school activities, including school councils; sports; and activities outside school, in the community and elsewhere.

True, there are good reasons for including some subject teaching in the mix. Nowhere is the case stronger than in maths and the sciences, where progression is linear and dependent on getting inside structures of interconnected specialized concepts. But even where subjects are indispensable, there will be no reason in Scenario 2 why every student should have to continue studying them for ten or more years, as with mathematics today. For some, this is a recipe for boredom and distaste for learning. There is a case for taster/option courses in, for instance, algebra and other parts of post-elementary mathematics (Reiss and White, 2013: 18–19). These will be short courses of a year or so, invitingly taught so as to interest learners in taking things further. Those who do not want to do so will be able to drop the subject, knowing that in their long life ahead they will have many ways of taking it up again if they wish. Given the changed world of work in Scenario 2, there will be less job-related reason to continue with a STEM subject such as mathematics where there is no intrinsic interest in doing so.

The reference to taster/option courses points to the very different conception of secondary schooling that will pervade Scenario 2. Whereas today we dragoon students into courses stretching over years, in Scenario 2, we will be far more interested in seeing that they are wholeheartedly absorbed in whatever they are studying (Sardoč and White, 2018). This is one reason why we will make use of other vehicles than school subjects, given the greater appeal that discussion groups, interdisciplinary projects and cooperative ventures inside and outside school have for many learners. Digital resources will be put to use in these and other ways, allowing learners to make videos together, assemble information to be fed into class activities, build up specialist knowledge in areas that especially attract them. Schools will, it is to be hoped, become less rigid in their internal architecture and far less monolithic in their treatment of individuals. Their lodestar will be the thought that most of these students have 80 or more years of active life after leaving school, and are sent on their way attached to a number of absorbing activities and with a willingness to explore new ones.

Educational aims

This last remark reminds us that we cannot get very far in discussing secondary school curricula and pedagogy without going back to overarching educational aims. Curricula and pedagogy are no more than vehicles for realizing these aims. In a system less straitjacketed by official requirements and less in thrall to Victorian traditions, schools will be freer to decide how best, in their particular circumstances, to meet these aims. Their staff, no longer under an oppressive work regime, will have the time and freedom of spirit to devise attractive ways of involving students in learning.

So, what should be these wider aims and who will decide them? In preparation for Scenario 2, we may look forward to an ongoing nationwide debate on these questions. The way is already open for this, given the six processes outlined at the beginning of

this article – increasing longevity, the progress of the internet, new patterns of work, climate change, the growing gap between rich and poor, the rise of populism. These will affect how we think of education in particular, as well as about the shape of our lives in general. This applies as much to early upbringing as to schooling and beyond.

I have already revealed some of my own views on the purposes of education as applied to Scenario 2, including initiation into a community of language users; moral, civic and aesthetic development; self-understanding; and understanding other people and the natural and human worlds. Career considerations have a place, but a less dominant one than in current policy. More central is being absorbed in worthwhile pursuits for their own sake, and being eager to explore new ones.

Underlying all these aims is the idea that education should help to equip learners to lead a fulfilling personal life and enable others to do so (Reiss and White, 2013). Central to it is the notion of a fulfilling, or flourishing, personal life, whether for oneself or others. This is a philosophically contentious topic. Some relativists, hedonists and religious thinkers will not share my view that personal well-being consists in wholehearted engagement in intrinsically worthwhile activities and relationships (see Chapters 3 to 8 in White, 2011). While this applies to more traditional societies as well as our own, we, but not they, also prize being able autonomously to decide what activities and relationships to engage in. I take a catholic line on what these worthwhile pursuits can cover – enjoying jazz and popular music as well as Mozart, watching football as well as Shakespeare, being in a free-love community as well as in a marriage – but stop short at any that are harmful to others, or trivial such as eating ice cream.

An ongoing commission on aims

These would be some of my own contributions to the national conversation on aims. Others will have different views – although my hunch is that there will be plenty of overlap in what different people say. All this will provide a grass-roots basis for a broad set of aims laid down for families, schools and colleges to follow. As for who will lay them down, this should not be in the hands of a section of the population, such as teachers (as in England pre-1988) or government ministers (post-1988). In a democracy, all voices count, not just those of a few. This speaks for some kind of widely representative standing commission, at arm's length from government, that will map out broad aims, welcoming discussion and revision in continuing interaction with a wide range of interested parties (White, 2019).

The role of this commission will end with these broad aims. It will have no power – unlike government today – to lay down to educational institutions how these aims are to be realized. Curricular and pedagogical decisions will be the province of schools and colleges themselves. It is they who will work out what vehicles best realize the overall aims in their own unique circumstances.

Newly salient aims

In Scenario 2, aims linked to our six historical processes will be more salient. They all suggest more attention to civic and political matters. From primary age onwards, all of us will be aware of our long lives ahead, and their consequences for work and well-being. We will have to be good at using digital resources and understand their potentialities for good or evil. In Scenario 2, the use of fake news and misuse of personal data by anti-democratic politicians may well be in the past, but vigilance will be a watchword for a democracy of equal respect, and its participants will know about these dangers from an early age. Schools will still be places where students learn,

by day-to-day osmosis, attitudes to work and leisure that will stay with them through their lives, but the content will be very different. At a more conscious level, they will also need to understand and discuss the place of work in our lives and the varieties of work on offer. Seeing these things in some historical perspective will engage them in issues about how the economy is run, and about the changes that have reduced the gap between rich and poor. Understanding and managing climate change in the context of global cooperation will by then be high on the list of educational aims. Here, as in matters to do with work and well-being, the pros and cons of a more frugal way of life will be a topic for discussion (Westacott, 2016). There may even be a case for bringing children up to be frugal, so that this becomes a settled disposition in all of them and not just a lifestyle option (Zwarthoed, 2015: 296–8).

In all these ways, civic education will be a top priority. Its home is more in interdisciplinary activities than in separate subjects, and pedagogically it points at least as much to discussion and student voice as to academic input.

Private education

If any private schools still exist in Britain in Scenario 2, they will be bound by the national aims laid down by the commission. There are likely to be few of them. The 7 per cent of all school students who are privately educated currently occupy elite jobs out of all proportion to their numbers – from 74 per cent of judges to 32 per cent of MPs (Green and Kynaston, 2019: 4). This puts power in the hands of a few and runs counter to the insistence in Scenario 2 on democratic equality of respect. Over time, their dominance of elite and other universities may well have been radically lessened through quotas for higher education (HE) acceptance far closer to 7 per cent. There will also have been a series of measures to integrate them over time into the state system (see Chapter 8 in Green and Kynaston, 2019). Changes in income, and in inheritance and property taxes, to reduce the wealth and income of the rich will at the same time have reduced the pool of those able to afford private school fees (Atkinson, 2015: 303–4, Proposals 8, 10, 11).

Education beyond school

At present, education beyond school is in separate spheres: universities, FE colleges, and – much more marginally – youth services and adult education institutions. The HE/FE split has suited a society that sees education largely in terms of equipment for employment, and that favours a status split between those who go on to graduate jobs, those trained as technicians and others. Within the British HE sector itself there is a further hierarchy, between Oxbridge and other Russell Group universities and the rest. In Scenario 2, there will no longer be room for these separations. Despite attempts to define the essence of the university, and thus justify its apartness, in my view none has succeeded (White, 1997, 2009). The division between HE and FE is only an administrative one, linked to historical class differences and employment prospects. Scenario 2, with its focus on equality of respect and rejection of the centrality of work, will see this division wither away. In the unitary college scheme that replaces it, some institutions will be more research-intensive than others, but this will be on a continuum and will not require separate systems.

It will no longer be taken for granted that young people move from school to college at the age of 18. With the exam bottleneck no more, and with a long life ahead, young people will have reason to tailor the age at which they begin post-school education much more to their needs. At 18, many understandably have only a hazy idea

of what course might be best for them. A few more years of experience in the world (as in my own case) often makes things clearer. In this connection, one of the benefits that 18–21-year-old students now often get from HE is time to ‘find themselves’, to explore new relationships and to sample activities that may or may not be the basis of a career, such as drama, journalism and public speaking. There is good reason why every person of this age, not only those privileged to go to university, should have such a stretch of time to themselves if this is what they want. The basic income scheme mentioned above, whether universal or dependent on participation, will make this possible.

In Scenario 2, there will be a variety of publicly funded institutions allowing anyone to follow up their particular interests, vocational or non-vocational. Sports clubs will be seen as part of the same enterprise as music societies or colleges catering for a variety of intellectual or practical enthusiasms. In these colleges, ‘investments in digital innovations will transform the classroom, with on-line teaching, MOOCs, digital degrees’ (Gratton and Scott, 2016: 340). All these institutions, apart from those in a dedicated and far better-funded youth service, will cater for people of all ages from teenage years to 100 plus. With less time earmarked for paid work, many of us will spend a large part of our life enjoying what they offer.

Conclusion

These are two scenarios for education in the coming decades. Given the power and wealth of those whose narrow self-interest favours the first, this is the one more likely to come about, unless there is concerted action in favour of Scenario 2. This will have to come from young people and others anxious about climate change, teachers and parents unhappy with a test-driven school regime, politicians and activists committed to equality of respect and other democratic values, workers’ organizations, journalists and the public at large. In this article, I have attempted a first and revisable outline of this new vision of education. I hope that it will help to bind these agents of reform more closely together in the collaborative task ahead. If it is to succeed, they must start now.

Notes on the contributor

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References

- Anderson, E.S. (1999) ‘What is the point of equality?’. *Ethics*, 109 (2), 287–337.
- Anderson, E. (2017) *Private Government: How employers rule our lives (and why we don’t talk about it)*. Princeton, NJ: Princeton University Press.
- Atkinson, A.B. (2015) *Inequality: What can be done?* Cambridge, MA: Harvard University Press.
- Daanen, H. and Facer, K. (2007) *2020 and Beyond: Future scenarios for education in the age of new technologies*. Bristol: Futurelab. Online. www.nfer.ac.uk/publications/fut154/fut154.pdf (accessed 1 April 2020).
- Fishkin, J. (2014) *Bottlenecks: A new theory of equal opportunity*. Oxford: Oxford University Press.

- Gratton, L. and Scott, A. (2016) *The 100-Year Life: Living and working in an age of longevity*. London: Bloomsbury.
- Green, F. and Kynaston, D. (2019) *Engines of Privilege: Britain's private school problem*. London: Bloomsbury.
- Keynes, J.M. (1931) *Essays in Persuasion*. London: Macmillan.
- Mason, P. (2015) *Postcapitalism: A guide to our future*. London: Allen Lane.
- OECD (Organisation for Economic Co-operation and Development) (2018) *The Future of Education and Skills: Education 2030*. Paris: Organisation for Economic Co-operation and Development. Online. <https://tinyurl.com/snspqgc> (accessed 1 April 2020).
- ONS (Office for National Statistics) (2015) 'How has life expectancy changed over time?'. Online. <https://tinyurl.com/tau52hy> (accessed 1 April 2020).
- ONS (Office for National Statistics) (2016) 'What are your chances of living to 100?'. Online. <https://tinyurl.com/rztx52d> (accessed 1 April 2020).
- ONS (Office for National Statistics) (2019) 'The probability of automation in England: 2011 and 2017'. Online. <https://tinyurl.com/vgo3oxs> (accessed 2 April 2020).
- Piketty, T. (2014) *Capital in the Twenty-First Century*. Trans. Goldhammer, A. Cambridge, MA: Harvard University Press.
- Reiss, M. and White, J. (2013) *An Aims-Based Curriculum: The significance of human flourishing for schools*. London: Institute of Education Press.
- Runciman, D. (2018) *How Democracy Ends*. London: Profile Books.
- Sardoč, M. and White, J. (2018) 'Education and the adequacy of options: An interview with John White'. *Theory and Research in Education*, 16 (1), 118–31.
- Simon, B. (1992) *What Future for Education?* London: Lawrence and Wishart.
- Skidelsky, R. and Skidelsky E. (2012) *How Much is Enough? Money and the good life*. London: Penguin.
- TUC (Trades Union Congress) (2019) 'British workers putting in longest hours in EU, TUC analysis finds'. Online. <https://tinyurl.com/rjo66sg> (accessed 1 April 2020).
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (1996) *Learning: The treasure within: Report to UNESCO of the International Commission on Education for the Twenty-First Century*. Paris: United Nations Educational, Scientific and Cultural Organization. Online. <https://unesdoc.unesco.org/ark:/48223/pf0000109590> (accessed 1 April 2020).
- Westacott, E. (2016) *The Wisdom of Frugality: Why less is more – more or less*. Princeton, NJ: Princeton University Press.
- White, J.P. (1973) *Towards a Compulsory Curriculum*. London: Routledge and Kegan Paul.
- White, J. (1994) 'The dishwasher's child: Education and the end of egalitarianism'. *Journal of Philosophy of Education*, 28 (2), 173–82.
- White, J. (1997) 'Philosophy and the aims of higher education'. *Studies in Higher Education*, 22 (1), 7–17.
- White, J. (2009) 'Further and higher: A philosophical divide?'. In Garrod, N. and Macfarlane, B. (eds) *Challenging Boundaries: Managing the integration of post-secondary education*. New York: Routledge, 13–28.
- White, J. (2011) *Exploring Well-Being in Schools: A guide to making children's lives more fulfilling*. London: Routledge.
- White, J. (2014) *Who Needs Examinations? A story of climbing ladders and dodging snakes*. London: Institute of Education Press.
- White, J. (2019) 'A new public education for England'. *Forum*, 61 (2), 175–82.
- Wilby, P. (2019) 'Eton master who wants pupils to learn very slowly'. *Guardian*, 13 August. Online. <https://tinyurl.com/yym6e5ub> (accessed 1 April 2020).
- Zuboff, S. (2019) *The Age of Surveillance Capitalism: The fight for a human future at the new frontier of power*. London: Profile Books.
- Zwarthoed, D. (2015) 'Creating frugal citizens: The liberal egalitarian case for teaching frugality'. *Theory and Research in Education*, 13 (3), 286–307. <https://doi.org/10.1177%2F1477878515606620>.