

Policies for Intergenerational Equity: (1) Education and Work

Policies for reducing intergenerational and age-related inequality potentially span all the domains discussed in this book. They can be applied in education, work, housing and in relation to welfare costs and benefits. For many people they must reach further still, including into the political domain. Reducing the voting age to 16, for instance, is supported by three of the major political parties in England, including, Labour, the Liberal Democrats and the Greens, with an active campaign in support by the Electoral Reform Society and the Votes at 16 Coalition. Not least important amongst the arguments in favour is that it would help reduce the growing demographic imbalance in electoral politics. To discuss the full range of relevant policies, however, would require a book in itself. In all policy debates the devil is in the detail, and the details cannot be rapidly glossed. This chapter concentrates only on policies for education and transitions to work, and the next on housing. They take housing because this is area where intergenerational inequality is most marked and education because it is amenable, at least in some areas, to some relatively simple policy reforms which would make a difference.

The education systems in the UK are not the primary cause of mounting intergenerational inequality. In fact, as we saw in Chap. 3, education remains one area where young people feel they are better off than their parents were. They have several years longer in school and get higher qualifications than their parents did. We have some of the very best universities in the world, with the system generally performing better than ever in the international league tables, and we punch above our weight

in the contribution that HE makes to research and innovation. Britain is still a world leader in innovation, despite the relatively low investment in Research and Development,¹ and this is largely down to the excellence of our university research. The school A level examination system, whatever else its faults, is very effective in preparing young people for more specialised higher education studies. A level graduates have a head start, for instance, against the average high school graduate in the US who starts university education with rather little specialist disciplinary knowledge.

But there is one major problem with the education systems in the UK which has, arguably, got worse for the younger generation. Our systems produce very unequal skills outcomes, and are doing very little, if anything, to improve our comparatively low and stalling levels of social mobility.² These failures pertain across the UK, but since Scotland, Wales and Northern Ireland have separate education systems, we concentrate in the policy discussion here on the predominant part—the system in England.

This education system in England has always been highly diverse and fragmented, and many would say it is becoming less like a system all the time. With the relentless promotion since the 1980s of a market-oriented agenda of school choice, diversity and competition, we have regressed in some ways to the educational voluntarism of the 19th century. This prized school diversity and independence above all else, but educational provision in England then lagged well behind what was available in other advanced states in terms of universalism and inclusiveness.³ Contemporary testimony to English educational backwardness in the 19th century is ample. From the declaration of the Select Committee in 1818 ‘that England is the worst educated country in Europe’, to Balfour’s assertion in 1902 that ‘England is behind all continental rivals in education’, contemporary debates were littered with comparisons with European systems, almost invariably to England’s detriment.⁴ In terms of inclusiveness in education we are in danger of becoming once again a laggard in European education.

The evidence of our relatively high levels of inequality is very clear from the cross-national data on educational qualifications and skills, considered in Chap. 2. Inequality in educational attainments (in terms of highest qualifications achieved) has reduced over the years but is still higher amongst 25–34 years olds in England than in all but three of the OECD countries in the Survey of Adult Skills (Spain, Italy and Northern Ireland).⁵ Inequality in skills opportunities and outcomes is

relatively high, though not extreme, at 15 years, according to the results of successive PISA surveys. Inequality of outcomes can be measured by the degree of variation in student scores. The UK ranked 11th out of 34 OECD countries on this measure for literacy in the 2009 PISA survey.⁶ Inequality of skills opportunity can be measured by the impact of social background on achievement. On this measure the UK ranked 7th most unequal of the OECD countries.⁷ But things seem to get relatively worse during the upper secondary and higher education stages.⁸ Most shocking is the level of skills inequality amongst young adults revealed in the SAS. Amongst 25–29 year olds, England has the highest inequality in skills outcomes (measured this time in skills Gini Coefficients) of all countries in the tests for Numeracy and the second highest for Literacy (after the US).⁹ On the social gradient measure of inequalities in skills opportunities the story is no better. Amongst 16–24 year olds England ranks 2nd highest in both Numeracy and Literacy on inequality of opportunity (only behind the Slovak Republic).¹⁰ On all of these measures we find greater inequality in skills amongst young people than amongst those aged 55–64. So, unless there are substantial improvements during the life course, which is unlikely, inequalities in skills, unlike in education levels, are getting worse in each generation.

These very high levels of skills inequality matter—for two reasons. Firstly, because skills inequality contributes to wage inequality which is in turn associated with all sorts of negative social consequences.¹¹ Extreme levels of inequality in earnings and incomes not only represent a major challenge to social cohesion; they are also associated with negative social outcomes across a range of domains, from public health and wellbeing, to social trust, political engagement, social mobility and crime.¹² Skills inequality probably also influences national economic performance, since countries with more unequal skills also tend to have lower average levels of skill and consequently reduced labour productivity.¹³ The second reason is that most of the inequality in skills is concentrated at the bottom end of the achievement scale, where the variation across countries is the highest. This takes us back to that third of young people who, as we saw in Chap. 2, fail to complete full upper secondary education and therefore lack a full Level 3 qualification, now considered the minimum across the OECD for successful participation in the labour market. This is the most vulnerable section of our young people and the one that is almost certainly going to fare very much worse in employment over the life course than its equivalents in the parents' generation. So what can be done to

improve the performance of the education system with respect to this key group?

The answers with regard to early years learning are perhaps most straightforward. Raising attendance rates in pre-school education is essential to reducing the social gaps in skills which arise early in the lives of children. Most commentators and policy-makers agree on this.¹⁴ Governments balk at the costs of extending entitlements to subsidised pre-school education to children from two years onwards, even though research shows it will probably nearly pay for itself in the longer term by raising the productivity and taxes paid of both mothers and children.¹⁵ Nevertheless, substantial improvements have been made in these areas which will no doubt reduce inequality in skills of older children in the longer term. We just need to take this further, so that subsidies for pre-school education can be extended to two year olds, particularly to those from families on low incomes.

REDUCING INEQUALITY IN LOWER SECONDARY EDUCATION

The biggest challenge lies in what to do with lower secondary schooling where large inequalities stubbornly persist despite the various reforms in the New Labour era to improve the performance of lower achieving children and schools.¹⁶ The relatively high inequalities in secondary schools in the UK can be partly attributed to our high levels of income inequality, which disadvantages poorer families while allowing better-off parents to buy better schooling for their children, either in private schools or by moving to more expensive areas with the better state schools. However, this is not the whole story. OECD cross-country analyses of the PISA data on 15-year olds' skills show only a weak correlation between income inequality and inequality of education opportunity at the country level. In fact, as the OECD report on equity concludes: 'the evidence suggests that, in general, cross-national differences in inequalities of performance are associated more closely with the characteristics of the education system than with underlying social inequalities or measures of economic development.'¹⁷

The dominant position within current cross-country research on school systems and skills inequality is that more unequal outcomes are likely to occur when there is early selection to differentiated tracks and types of school; a higher proportion of privately funded schools; a lack of standardisation in curricula and assessment; and a federal system where

funding is devolved to the regional level.¹⁸ According to this research, early tracking increases inequality as combined peer effects and school effects raise aspirations amongst students in high status tracks and schools and depress aspirations amongst students in lower status tracks and schools.¹⁹ Schools which are entirely privately funded, and have high fees, promote inequality as families with high incomes can buy higher-quality education for their children in schools with smaller class sizes, better resources and better-paid teachers. Lack of standardisation in curricula and assessment systems promotes inequality because school practises become more differentiated according to the social and ability composition of their intakes, thus exacerbating variation in school and peer effects across schools.²⁰

The UK suffers from all of these problems. We have a substantial proportion of fully private schools which are, because of their very high fees, almost uniquely elitist amongst systems of private and semi-private schools across the world. We have different education systems in the various nations of the UK which adds to overall UK inequalities. And our school system in England is anything but standardised. While the state school system is notionally non-selective and comprehensive, in practice it is becoming increasingly selective and tracked. Over the past 30 years an obsession with school choice and diversity, and competition between schools, has led to the creation of multiple types of secondary school with different governance and funding, admissions procedures and curriculum priorities. The current list includes free schools, faith schools, studio schools, university technical colleges and academies of various kinds, including sponsored academies, chain academies (ARK, ULT, AET, etc.) and converter academies. Providers include charities, foundations, social enterprises, faith and community groups and private education businesses. These schools are still publicly funded, and controlled, to different degrees, by the state, but the sense of an integrated public system with a public purpose is disappearing. Local Education Authorities have been eviscerated and local planning eroded. Theresa May's plans for a new wave of grammar schools will only add to the problem.

Many of these initiatives have been undertaken in the name of improving standards for children from poorer families in less affluent areas. And there have been some successes, notably recently in standards in London's schools. Improvements here may be partly due to the generally strong and improving performance of the increasing number of children from immigrant families. It may also be in part due to the

encouragement of cooperation between schools through initiatives such as New Labour's London Challenge. But across the whole system it is hard to see how educational inequalities can be reduced by a proliferation of different types of school and increasing fragmentation of the school system. Certainly the cross-national evidence does not support this.

There is no evidence that increasing differentiation and competition between schools improves overall standards,²¹ although giving schools more autonomy in professional areas (like pedagogy and the curriculum) has been associated with better results in some studies.²² The education systems in Europe which have most equal educational and skills outcomes, and the smallest social gaps in achievement, are in the Nordic countries. These countries all have private or semi-private school sectors, but the schools are relatively un-elitist because they are state subsidised and charge low fees. The state sectors all operate with non-selective, all-through primary/secondary comprehensive schools. School choice policies have been adopted in some areas, notably in Swedish cities where they have been associated with rising inequality,²³ but overall parents do little school choosing. There are various reasons for this: sparsely populated rural areas offer little choice of schools; all-through schools discourage changes of school at the end of the primary phase; and schools tend to be very similar anyway. The key to the relatively low inequality in Nordic systems lies in the low differentiation between schools. Schools tend to be similar both in the social balance of their intakes and in their average performance levels.²⁴ The two are connected.

In most countries the educational achievement of children is influenced less by their social background than by the nature of the school they attend and the children they go to school with. OECD analyses show that over one third of all the variation in individual student performance in PISA tests across the OECD can be attributed to differences in average school performance, and the school characteristic which most influences school performance is the nature of its intake.²⁵ Based on PISA 2006 data, OECD calculates that in most OECD countries the social intake of the school 'far outweighs the effects of the individual students' socio-economic background' on student scores.²⁶ The social composition of the school has such a large impact because it affects everything else about the school, including what are referred to as 'peer effects' and 'school effects'—meaning the impact of other children and of the school ethos. Across all the OECD countries, the social intake of the school (measured by the educational and occupational level

of parents) explains about 55 percent of the difference in average performance between schools. However, in some countries, including in Luxembourg, the UK, the US and New Zealand, the proportion is much higher, in the UK case 77 percent. This compares within 23 percent in Finland and 26 percent in Norway.

Educational and skills outcomes in England are very unequal, in part because schools vary so much in the social mix of their intakes, which are much more differentiated than in Scotland, for instance.²⁷ Intake differences exacerbate differences in school norms and drive up inequalities in outcomes. But how do you change this? Nordic countries, except perhaps Sweden, are fairly homogeneous societies with relatively low levels of inequality. But England's populations, particularly in the large cities, are extremely diverse and income inequality is higher. How can the school system be designed so that it creates less inequality in this context? A number of structural changes are theoretically possible.

We could roll back the diversity and choice agenda, which has so far produced no evidence of raising average levels of achievement or reducing inequality. According to the OECD's commentary on England's performance in the latest (2015) PISA survey, standards, at least in English, Maths and Science, have flat-lined for a decade. This would mean reversing the proliferation of school types and abolishing the myriad distinctions between faith schools, academics, local authority community schools and so on. Local authorities could be given back responsibility for school admissions and instructed to reduce inequalities in school intakes by introducing the 'banding' system which, under the former Inner London Education Authority, required each school to have a balance of pupils of different levels of prior achievement. School catchment areas could also be re-introduced across the board, with local authorities being required to review and, if necessary, redraw their boundaries regularly. Denmark already operates such a system. This would help to avoid the post-code lottery which allows residential segregation by social class and ethnicity to skew school intakes and concentrate a disproportionate number of minority ethnic and second language speaking children in particular schools. Recent research by Demos, for instance, shows that 50 percent of non-white students are in schools where minority ethnic students are in a majority. As the Government commissioned Casey Review points out, this cannot be good for integration and social cohesion.²⁸

Other measures could be adopted which have been seen to work in other European and Asian countries. School heads and teachers could be rotated between schools, as happens in Japan, to equalise resource distribution between schools.²⁹ Private schools could be integrated into the state sector, either as 11–18 schools or as Sixth Form Colleges, as in most European countries: given sufficient autonomy to provide pedagogically and confessionally distinctive forms of education for those who want it, but with low, state-subsidised fees to make them accessible to a wider range of students. Distinctive school specialisms in state schools could be maintained, but admissions policies would not allow school specialisms to justify selection in admissions based on academic achievement.

More radical still would be to abolish the outdated distinction between secondary schools with and without sixth forms, since this represents one of the biggest divides between secondary schools. Traditionally, the sixth form has been regarded a key marker of a good secondary school and schools without one are often seen as second class. Current Government policy is that all new academies should have sixth forms, so we are moving in the direction of giving all schools sixth forms. However, the school sixth form is often an expensive and ineffective way of providing universal upper secondary education. School sixth forms are rarely big enough to sustain a wide range of subjects so they often neglect the creative arts, technical subjects and less popular foreign languages. They tend to focus on a narrow range of academic subjects that do not appeal to all young people.

Sixth-form and tertiary colleges, on the other hand, have been highly successful and very popular. Their A level results are on average ten percent better than those of sixth forms in state secondary schools, and their students are more likely to progress to Russell Group universities and universities generally.³⁰ Many young people prefer to progress at 16 to a new institution with a more adult environment. Unfortunately, there are currently only 93 of them country-wide and only one in five teenagers live within five miles of one. Sixth-Form Colleges feel under threat because of the forward march of academies with sixth forms. Many parents with children in schools with sixth forms defend them vigorously, but that is partly due to the lack of good alternatives in their area. Much more rational and efficient than proliferating new academies with small sixth forms would be to introduce—gradually—an institutional break at 15/16, as in most other European and East Asian countries. We should create a dedicated upper secondary system of sixth-form colleges and FE

colleges. Sixth-form colleges would provide the comprehensive academic and technical curriculum for 16–18 year olds in every area. FE colleges should be rationalised and more centralised, providing the full range of 16–18 provision but focusing more on the specialised technical areas which relate to local industries and which require expensive equipment to deliver the curriculum.

All of these changes would be administratively possible, although not necessarily popular in schools which have seen incessant short-term reforms over a period of 30 years. Much would need to be done to keep teachers and heads on board, even though many might in principle agree with the aims. Restoring New Labour's successful school renovation programme, *Building Schools for the Future*, which was controversially scrapped by the former Coalition Government's Education Secretary, Michael Gove, would no doubt provide a useful tonic. A concerted effort to restore the status of teaching as a profession would also help. The main challenge, though, would be to develop a political vision for education which prioritised the equalisation of opportunities and outcomes, and which brought parents together to support the means to do this. After many years of policy moving in the opposite direction this would not be easy.

REFORMING UPPER SECONDARY EDUCATION AND TRAINING

Reforming upper secondary education and training may be easier than changing lower secondary education because just about everyone agrees it is failing, most notably because of the absence of a strong vocational provision within it. The system has an absurdly complex structure of providers, courses and qualifications. This confuses young people, parents and employers, and deprives this phase of education of the normative standards which are essential for encouraging achievement and reducing inequality. We not only have sixth-forms, in all the various types of secondary school; we also have Sixth-Form Colleges, Tertiary Colleges, Further Education Colleges, and an army of private training providers, some charitable and not-for-profit foundations and other for-profit. The recent Sainsbury Review was not able to say how many of these there are, but noted that they account for 30 percent of the adult skills budget.³¹ Courses on offer vary hugely in duration, standard and quality and there is no common core of learning across all the different courses and programmes.

In the absence of a proper national qualification system, England—uniquely amongst nations—operates a market in educational qualifications. This has produced a dense jungle of awards which no-one understands, least of all the students or the employers who use them for recruitment. In 2015 there were officially over 21,000 vocational qualifications on Ofqual's Register of Regulated Qualifications, excluding GCSEs and A levels. These were offered by 158 different awarding organisations. Of these awards over 12,000 were eligible for public funding for teaching to 16–18 year olds. An individual aiming for a future in plumbing, for example, could choose between 33 qualifications offered at three different levels by five different awarding organisations.³² Because of the Byzantine complexity of this under-regulated vocational market in providers, programmes and qualifications, there is an overall lack of transparency in the sector which undermines its credibility and value. The programmes on offer vary too much in content and quality and many of the qualifications awarded are worthless on the labour market, as we saw in Chap. 2.

The over-arching aim of any systemic reform to our upper secondary education must be to create a set of academic and vocational pathways for young people that are all comprehensible and valued; which have transparent standards and which lead to more predictable destinations in the labour market or to higher levels of education and training. A break at 15/16, with a new and simplified institutional structure with dedicated upper secondary institutions would be the most rational way of organising the system, but might not be essential. The main point would be to reduce and clarify the pathways and qualifications, so that there was greater standardisation with regard to the duration, content and quality of the different programmes on offer. A strong argument can be made in favour of a normative three-year duration for upper secondary programmes, to bring students up to the standard in other countries which mostly have three-year upper secondary programmes. A common core of Maths and English—and possibly Civics—with structured work placements on vocational courses, should be mandatory for all programmes. The Sainsbury Review goes some way in this direction, although it sticks with the two-year programme as the norm. The Governments' Green Paper on industrial strategy³³ floats the idea of a new Transition Year at school for lower achieving students, but this would be demoralising for those at the end of lower secondary school and it would be better to incorporate the additional year into upper-secondary education.

The Review recommends a set of 15 main technical pathways at the upper secondary level, with a nod towards the Scandinavian countries which have a similar arrangement. The organising principle behind the pathways is the notion of the skilled occupation, broadly defined, as in the German concept of the *Beruf*. The Review rightly argues that technical education should be occupationally-based since this is what provides its value on the labour market. That means avoiding the weakness of previous arrangements whereby vocational qualifications were either too general to serve as a preparation for entry to jobs, as with the now defunct General National Vocational Qualifications, or too job- and firm-specific, as with many NVQs, to serve as initial occupational training for young people. Confusingly, the Review still organises the technical programmes around sectors, rather than occupations existing across sectors. Nevertheless, within each sectorally-defined pathway there would be options which would be increasingly specific to occupations and occupational clusters as students progressed through their programmes. These occupational designations would appear on certificates awarded, along with details of work placements completed, and this would give employers a clearer idea of what the award holder could do.

Technical pathways in upper secondary education need to be offered in both work-based modes and college-based modes, but these need to be integrated within a single system. Britain will never create the encompassing set of high quality Dual System apprenticeships taken by upwards of 40 percent of young people in countries like Austria, Germany and Switzerland. We had such a system for ten years or so after the 1964 Industrial Training Act, but the social partnership and sectoral infrastructure on which it was based has now been demolished and can't easily be re-created. Nevertheless, apprenticeships can still have a place in upper secondary provision if organised on the hybrid model, as adopted in countries like Denmark, Netherlands and Singapore, where the state plays the coordinating role, and where employment-based apprenticeships are combined with college-based apprenticeships. Even countries like Germany are having to adopt a similar plurality of modes now with the shortfall in employer-offered apprentice contracts.

Our current apprenticeships are moving in this direction but their design is still full of flaws. Some are very good, but many are too short and most do not lead beyond Level 2 qualifications. This defeats the whole objective of the apprenticeship which is to prepare young people for skilled work at craft and technician levels (for which they need

to be qualified at Level 3 or Level 4). Absurdly, most apprenticeships now are taken by those already employed who are over 19 years of age. The situation has occurred because the regulations allow it, and because employers take advantage of the Government subsidies to place existing employees, who already have many of the skills to gain qualifications, on apprentice contracts. A mere six percent of 16–18 year olds are currently taking apprenticeships.³⁴ This situation has to change. Apprenticeships should be primarily for young people and must lead toward skilled craft and technician level qualifications. New government measures to specify minimum levels of off-the-job training and duration of programmes, and to require attainment of prescribed standards in English and Maths, are moving in the right direction, but much more needs to be done to make the system credible and fit for purpose.

Because apprenticeships are never likely to provide the main pathway for technical education for young people we need an alternative of high quality, college-based technical provision. The pathways, as advocated by the Sainsbury Review, should be aligned with the apprenticeship, sharing skills standards and a common core curriculum, and leading to the same overarching qualifications, just as occurs in France with the CAP qualifications taken by both apprentices in centres d'apprentissage and by vocational students in the Lycée Professionnel. Their delivery modes, however, would be different. Instead of the on-the-job learning enjoyed by apprentices, college-based technical students would need to undertake structured work placements. The Sainsbury Review recommends that the placements should be prepared in advance and monitored by their college lecturers. Students would keep a log of their activities and what they had learned, and employers would provide a report, both of which necessary for successful completion. Colleges would receive additional funds of around £500 for each placement. A new system of national technical awards would be developed under the aegis of the new Institute for Apprenticeship which would convene expert panels to determine the skills standards relevant for each occupational branch of each award. All of this makes a lot of sense. However, in crucial respects it does not go far enough.

Firstly, work placements are envisaged to last for about four to six weeks. This is far too short for the work placement to be a credible substitute for the on-the-job experience of the apprentice. In France the equivalent would be the 'stage' which typically lasts six months or more. The objection to longer placements would be the difficulty of finding

employers to provide them. Indeed our FE colleges, which in recent years have lost many of their networks with local employers, might find this difficult. But a rationalisation of college provision, currently underway with the so called Area Reviews, might make this feasible again. Colleges should be encouraged to re-develop their sectoral specialisms, which foster the close links with local employers that would make extended work placements for technical students more feasible. Whether the Government needs to set up yet another kind of institution—like the Institutes of Technology proposed in the Green Paper—needs more thought. Re-purposing further education colleges, many of which are excellent, might be more effective.

Secondly, the proposed new state-led system of technical qualifications still falls short of the full national system it aspires to. The Institute of Apprenticeship and Technical Education—a proposed Government agency which would develop occupational standards and have oversight over the qualification system—is comprised of ‘experts’ working in an independent capacity; college organisations, trades unions and professional associations are not represented as of right, although they may be called upon. There is no mention of the volume of labour market research that might be needed to develop these standards. This is a German-style BIBB lite. The BIBB (Federal Institute for Vocational Education and Training) in Germany, which develops the skills standards for occupational qualifications, employs some 600 people, many of them researchers. Representatives of employers, trade unions, Germany’s federal states and the federal government work together on the BIBB Board. The institutional set-up recognizes that developing occupational standards is a complicated business in which many different parties have legitimate interests. The proposed slim-line Institute of Apprenticeship cannot conceivably perform the same function itself.

Instead, the Sainsbury Review recommends that it puts contracts for developing occupational standards out to tender. In a similar way, private awarding bodies will be invited to become sole providers of awards in each technical area. But it will still be private bodies who will be awarding ‘national’ certificates. And this will not solve the problem of standards being eroded by private awarding bodies offering ‘easier’ qualifications to increase their market share. In this case they will just be competing for market share with different awarding bodies offering qualifications in other technical areas, rather than alternative qualifications for the same occupation. The Review makes a strong case for putting the

state in charge of national qualifications, but then in practice brings the market back in to develop and award qualifications.

The ambivalence about state and market runs through the report. There is the constant and familiar refrain about an 'employer-led system'. Then follows a powerful advocacy of state responsibility for the overall qualification system. This is a misconceived dualism. If they are to be coherent and credible, national qualifications need be awarded by the state, not by private bodies. Employers, professional associations and trades unions all need to be centrally involved in the process, but their various views and interests should be concerted through a representative body convened by the state.

While moving in the right direction, the recommendations for achieving higher standards of literacy and numeracy amongst vocational students lack bite. Requiring students on technical courses to reach a specified minimum standard in Maths and English to achieve their certificates, as is now the case on apprenticeships, is essential, and has been standard practice in most countries. How this will be achieved is barely discussed and colleges are to be left to decide how to organise the learning in these areas. The learning of English and Maths should be geared towards requirements of the technical subjects of the programmes in question. This already happens in colleges. The problem is how to raise the profile of these areas of the vocational curriculum. Establishing dedicated curriculum areas, and indeed even dedicated classes with specified minimum hours, is one possibility. But the bigger issue is how to raise the standard of teaching. Much of the English and Maths teaching in colleges is undertaken by lecturers who are not specialists in the subjects and who have not been trained to teach them. Driving up the standards in these core subjects would require giving them much more prominence in the curriculum and also hiring many more specialist lecturers. Class contact hours on vocational courses also need to be reviewed. At present, vocational students in colleges often have far fewer hours in the classroom or workshop than the typical A level student in a sixth-form college. French Level 3 vocational students typically spend 30–36 hours per week in the classroom or workshop, on courses that last three years. In England vocational students often have only half this level of teacher contact and their courses are shorter. If we want our vocational students to reach the standards achieved in other countries, we will have to invest much more in giving them the time to do so.

TERTIARY EDUCATION

Tertiary education in England also needs some major reforms. We have succeeded in raising participation in university higher education to near 50 percent, which is a considerable achievement. But arguably too many are now going into general university higher education while too few take higher-level technical tertiary courses. The supply of university-trained graduates is beginning to outstrip demand for graduate skills in the labour market and the returns to bachelors degrees are likely to decline, if they have not already done so. The wage premium for graduates has held up in most countries—graduates are still likely over their lifetimes to have higher employment rates and to earn more than non-graduates in most countries. Nevertheless, graduate pay in real terms is declining in many countries and the wage premium is either reducing or becoming more diversified by course and university.³⁵ Increasing yet further the proportion studying general university degrees, as the Government plans to do with its lifting of the cap on university undergraduate numbers, will only the increase the number of young people graduating with high levels of debt but little chance of finding graduate jobs. They will feel cheated by a system that has promised them high rewards for investing so much in university education but fails to deliver in terms of jobs. This is already happening in the US, where there is rising discontent amongst graduates who have paid high fees to attend less prestigious private universities whose degrees, they discover, are not worth much. Despite this, young people in England still increasingly apply for university higher education courses, despite the debts they will accumulate and the uncertain prospects they will face. But this is partly because there are no good alternatives to university-based tertiary education.

Technical tertiary education, which once flourished in our FE colleges and the former polytechnics, has virtually collapsed. The Higher National Diploma (HND) and Higher National Certificate (HNC) used to be highly regarded technician-level qualifications. Many young people and employed adults studied for them in colleges and polytechnics, either full- or part-time, and they provided an important avenue for career progression, allowing former apprentices and skilled workers advancement into technical, supervisory and management roles. Yet in 2014/2015 only just over 33,000 were enrolled for these courses, mostly in colleges, and the overwhelming majority in Business Studies.

No more than 2.5 percent of university undergraduates were enrolled. Foundation Degrees, a more recent innovation in shorter vocational tertiary provision, dating from 2000, initially did well, recruiting over 80,000 students by 2008/2009.³⁶ However, the numbers participating declined sharply after the caps on undergraduate numbers were relaxed by Government, with only just over two percent of HE undergraduates now taking these courses. The two main vocational alternatives to 3-year bachelor degrees now enrol just 3.7 percent of undergraduates in HE.

The atrophy of technical tertiary education means the loss of an important avenue for mobility for young people in England. In many of the world's richer countries technical tertiary education is well established and delivers good labour market prospects for young people. OECD analysis of data from 2011 shows that men in OECD countries with short-cycle vocational tertiary education earn on average 26 percent more than those with only upper secondary education, and women 32 percent more. The average return is lower than for Type A higher education, but not by much, and it may be considerably higher for those with lower levels of tertiary attainment and skills. A number of countries have well attended and highly respected technical tertiary education routes, either based in Universities or in other dedicated vocational tertiary institutions. Germany has its technical universities (Fachschulen) which specialise in applied science and technical degrees, all at the bachelor level, as well as other institutions offering shorter tertiary vocational provision. The Netherlands, likewise, has polytechnics and higher vocational schools offering vocational tertiary provision at various levels. France has over 100 IUTs (Instituts Universitaires de Technologie) which are based in universities and offer two-year degrees in technical subjects. Singapore has developed a large polytechnic sector which enrolls over 40 percent of young people on three-year programmes leading to technical qualifications equivalent to the UK's Higher National Diplomas. Interestingly, in this case, the polytechnics recruit young people straight from lower secondary schools, fast-tracking them to short-cycle degree standards by the age of 19 (or older if their studies are interrupted by national service). In all these countries, degrees from these sectors are generally well esteemed and offer good labour market destinations.

So why has this type of provision declined so rapidly in the UK? Part of the answer lies in the fact that we have removed the cap on student numbers on bachelors programmes in HE. Universities have the opportunity to recruit as many as they can onto the high-fee-charging bachelors courses. Prospective students have been led to believe that bachelors

degrees offer the best labour market prospects and they tend to chose this option in favour of shorter and less expensive short-cycle degrees despite the higher costs, because their student loans cover the fees which need not be re-paid until later. The perceived prestige attached to the bachelor's degree seems to outweigh the benefits of the lower student debt which would result from taking a shorter degree. This cannot be the whole of the answer, however, because short-cycle technical tertiary education was not that popular even before loans were introduced and caps removed. The fact is that we have not invested enough in technical tertiary education and have not made it attractive enough to prospective students.

A large and effective tertiary sector was created by Singapore's Government from the 1980s, as that country was upgrading its economy from one based on low-cost assembly to advanced, high skills manufacturing.³⁷ High enrolments were achieved in the polytechnics partly as a result of the stringent limits placed on university admissions. In the early days only a quarter of the school-leaving cohort was allowed attend university. However, the Government also invested massively in the new polytechnic sector, building five new state-of-the-art polytechnic campuses. The new polytechnics boasted exceptionally high quality buildings and learning environments, with extensive IT-based learning, fully computerised lecture theatres, and advanced facilities and equipment for learning manufacturing skills. The latter included fully automated small manufacturing plants with robotic CNC machines and automatic conveyancing. You won't find many FE colleges in England with similar facilities, even now.³⁸

Britain needs to re-balance its tertiary education provision if we are to avoid producing a surplus of graduates with high levels of debt and poor employment prospects. Creating an attractive range of short-cycle technical degrees in colleges and universities would make an important contribution to this. To achieve this we need to restore the caps of student numbers in bachelors programmes and invest more in developing the curricula and facilities for these technical programmes. We also need to change the funding incentives so that universities and colleges invest in high quality short-cycle degrees.

Policy-makers also need to look again at the conditions in the labour market for students and young graduates. In many ways young employees and job-seekers are at the sharp of globalisation. Because they are new to the labour market, and the least protected by tenure and unions, they are the first to experience any new employment trend that seeks to

increase ‘labour flexibility’ as a way for employers to reduce operating costs. The latest manifestations of this are the proliferation of unpaid internships and ‘zero-hours’ contracts. Both are currently on a sharp upward curve. Zero-hours contracts are becoming endemic to the so-called gig-economy, but also elsewhere. Uber and Deliveroo are just the tip of the iceberg.

Firms favour so-called the zero-hours contracts because it allows them maximum flexibility—and therefore lower costs—in deploying labour. Increasingly they are engaging people to provide services on an ostensibly ‘self-employed basis’ so that they can get away with minimum hourly rates and avoid paying national insurance contributions and holiday pay. But, as tribunals and courts are now beginning to acknowledge, their workers are in reality employees. They are bound to accept whatever tasks their employers give them, have little discretion over how to perform them, and are frequently denied the right to work for another employer.

Unpaid internships are also becoming an increasingly common means for exploiting young people. Periods of unpaid work experience, as part of organised study programmes, or undertaken privately for short periods to gain a sense of working life in a particularly industry, are legitimate. The employers gain little in productive output. But internships which are not part of study programmes, or which are undertaken privately, but exceed a month in duration, should count as employment and be subject to employment law and living wage legislation. In both cases, with zero-hours contracts and internships, employer evasion of standard employment rights should be stopped.

STUDENT FINANCE

Lastly, there is the vexed question of student finance. The current system of fees and loans is unsupportable and is heading for a big crash. It’s morally indefensible because it is encouraging a whole generation of young people to acquire huge debts which they will be paying off through much of their adult lives while also paying historically high proportions of their incomes on rent or mortgages. And it is highly inequitable for two reasons. Firstly, because one generation is paying for a service which previous generations have had for free. And secondly, because tuition fees are much the same for all courses. Once over the earnings threshold of £21,000 pa, and until loans are written off 30 years later, graduates pay back the full loan plus interest for fees which were

virtually the same for each course, irrespective of what it is worth on the labour market. The income level at which they start to repay can be changed by Government and is now being lowered.

The other problem with the system is that it has proved to be very expensive and promises to get more so. The Institute for Fiscal Studies (IFS) estimate that, given the proportion of graduates not earning enough to pay back their loans in full, taxpayers will end up paying 43 percent of the value of loans.³⁹ With rises in tuition charges resulting from the removal of fee caps, and including other Government support packages for teacher training and broadening access to higher education, the long-run public costs of the current system would be £24,592 per full-time student and £7.4 bn in total per year for full-time students in England.⁴⁰

The current mess in the financing higher education could have been avoided. There was always a simpler and more equitable solution available in the form of an all-age graduate tax. This could be designed as an additional income tax of, say, 2.5 percent, levied on all English-domiciled graduates who received subsidised undergraduate education in English universities and are earning above £21,000 pa (the current loan repayment threshold). Neither of the reports on higher education finance by Dearing and Browne⁴¹ gave serious thought to a graduate tax. UK university leaders were always against it, because it meant relying on governments for most of their funding. They preferred to have the money direct from fees (which in time they could regulate). Nor would the scheme have been popular amongst graduates who had benefitted from tuition-free higher education. But the efficiency and equity arguments for such a tax are unimpeachable.

The tax would be simple to levy through the HMRC self-assessment system. A small number of graduates might avoid it for periods by working abroad, but the number of these would be much lower than the proportion in the current system who will not pay back their loans. The tax would meet the government's own principle that students should contribute substantially towards the cost of a higher education from which they have benefitted financially. And it would be much fairer than the current system. Graduates would pay back in proportion to their earnings which derive, at least in part, from the value of the particular courses they had taken and the degrees they had acquired. A small extra tax on graduate earnings could raise a substantial part of the annual costs of first degree higher education.

Some rough estimates of the sums involved in England suggest the feasibility of such a system. In 2016 there were some 6.3 million English-domiciled graduates, aged 20 to 64 and in employment, who were likely to have received subsidised first degree education in England, having been born in England or elsewhere in the EEA and arriving in England before the age of 21. Of these, 74 percent were earning over £21,000 pa, with mean earnings in this group of £43,500 and taxable pay of £32,500.⁴² An all-age graduate tax of 2.5 percent on this group would currently yield an average annual graduate tax payment of £812 per person and just under £3.8bn in total annual tax revenue. The total cost in English universities of full- and part-time first degree undergraduate study for students domiciled in England or born in non-UK EU countries—including university costs and maintenance costs—can be estimated to be £11.8 bn.⁴³ The all-age graduate tax would cover around 32 percent of these total costs, with a taxpayer annual subsidy of around £8 bn.

The annual public cost of this system would be comparable to that of the current system of fees and loans. The IFS estimate that the taxpayer subsidies for undergraduate education for full-time students in England—including loan subsidies, teaching grants and maintenance grants—was £7.4 bn pa (at 2014 prices). We can estimate that at 2016 prices, and including part-time students, the public costs in 2016 were over £8.25 bn pa, somewhat above that under the proposed graduate tax.⁴⁴ An additional boost to the 2015 level of maintenance grants, raising the maximum to, say, £5,000 pa, would bring the public subsidy under a graduate tax to a similar level as the current subsidy.⁴⁵

Writing off student loans, and replacing them with a graduate tax and enhanced maintenance grants, leaves the current taxpayer subsidy for undergraduate education largely unchanged. However, it represents an immediate additional revenue for the Government which is currently paying the full cost of tuition fees by funding the loans issued by the Student Loan Company and which will not see the loans repaid for many years. Over the longer term, all-age graduate taxes will also generate increasing annual tax revenue. Even assuming that HE participation rates soon peak, the proportion of graduates in the labour force will continue rising until 2067 when the current cohort of 18 year olds—with 48 percent participation rates in HE—reach retirement age. By this time nearly half the labour force will be graduates and, even allowing for some decline in the graduate employment rate, there would be some 50 percent more graduate employees liable for the graduate tax than in 2017, with a proportionate increase in the revenue from the tax.

Over the long term the public subsidy required when financing higher education through an all-age graduate tax should be lower than that through loans. However, the greatest advantage of this system is that the tax payments would impact far less on the current generation of graduates than loan repayments do, particularly between the ages of 25 and 50 when financial burdens are highest. Under the current system graduates earning over £21,000 pay back their loans at nine percent of their earnings over £21,000 until their remaining loans are written off 30 years later. For those on average earnings for this group this amounts to repayments of £2,025 pa, compared with the £812 pa that would be paid in graduate tax.

Typical graduate annual repayments under the current loan system are two to three times higher than they would be under a graduate tax and the gap will grow as the caps on fees are lifted and average tuition fees rise. Under the proposed graduate tax, governments would be likely to resist paying higher tuition subsidies to universities, and graduate contributions through the graduate tax would remain stable in real terms. Direct public funding of higher education for undergraduates would also avoid the growth in inequality in access to high quality undergraduate courses which would arise with the increasing differentiation of fees resulting from the lifting of the fee caps.

It would have been difficult to win political support for such a tax ten years ago, before fees and loans had been introduced. Now that we know all the negative consequences of those reforms, not least to current and future generations of young people starting life with huge debts, the graduate tax might be considered in more favourable terms. The case should certainly be argued. There are few measures that would more visibly improve intergenerational equity.

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