




**THE TIMES**  
guide to  
**ELITE**  
**APPRENTICESHIPS**

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WEDNESDAY JANUARY 27 2016



**DEGREE-LEVEL TRAINING**

*The new class of higher apprenticeships*

**THE LEADING EMPLOYERS**

*The Times ranking of top 30 providers of elite training*

**PROFESSIONAL CAREERS**

*From accountancy to law, and banking to boat-fitting*

## 02 | GUIDE TO ELITE APPRENTICESHIPS KEY EMPLOYERS

### OPINION

# Become an apprentice! If it's good enough for Dickens ...

**ALICE THOMSON**



"Do I really need to bother with university?" is the question I am asked most by sixth-formers wondering how they will pay back average debts of £44,000 in tuition and living fees before they've even considered a mortgage. While parents are desperate to convince their children to try for Brasenose, Bristol or Bangor, they are unlikely to be picking up the fees.

One pupil asked: "I'm the first person in my family in three generations who is not going to go to university. Do you have any advice?"

Yes, consider apprenticeships. One hundred years ago an apprenticeship was more valued than a degree: fathers paid for their sons to work for a reputable company or begged a favour from a friend; universities were the cheap option. Dickens and Brunel didn't need to spend three years drinking on a campus. One was an article clerk, the other an apprentice.

Employers increasingly feel the same way. Many entrepreneurs and retail bosses left school in their teens and companies now want to train their own staff. You may have a degree from Imperial but if you can't wake up on time and you feel no loyalty to the company, it's worthless. Only last week the publisher Penguin said it had started recruiting non-graduates.

More than 49 per cent of all young people go to university now so undergraduates often find the experience less personalised. The higher education ombudsman has

received more than 2,000 complaints from students this year over issues such as too little time with tutors, overcrowded lecture theatres and poor teaching.

And it's harder to stand out. If you start work at 18 instead, you could have a head start. Look at Kirstie Allsopp, Sir Terry Leahy, the former boss of Tesco, and Zac Goldsmith, now running to be London mayor.

If you want an apprenticeship, it is hard work with longer hours and shorter holidays. Oddly, your parents and teachers may mind more than you do because, in their day, a degree was usually the quickest route to success. However, Mary Curnock Cook, the chief executive of Ucas, who left school at 16 to become a secretary, explains: "Being a graduate is now not a free pass to graduate employment. They should expect to come into the workplace at a relatively low level and develop through hard work."

A report by the Edge Foundation found that fewer than half of first degree graduates secured professional jobs within six months of graduating, and that included roles as fitness instructors, dancers, tutors and estate agents. The "wage premium" exercised by graduates, compared with those only qualified to A level, has fallen by 29 per cent since the early 1990s.

It's hard to know where to start looking at apprenticeships when so many parents and teachers are nervous of their benefits. However, 500,000 people make the leap each year — from hairdressing to accountancy, law, banking and journalism. By the time their friends leave university, the apprentices should have a skill, a healthy bank account and a lot of office gossip.



### PROFILE

## Blazing a trail to the heart of the Establishment

Not only does the government talk the talk with its wish to expand apprenticeships, it walks the walk too, writes Greg Hurst. Within three years the civil service has become the biggest provider of elite apprenticeships. In 2013 it launched its fast-track programme

with 100 vacancies for level-4 apprenticeships in project delivery, business administration, digital and technology, commercial and finance. The two-year course means working in a government department and studying for a higher national certificate and national vocational

qualification at level 4. The following year recruitment doubled and in 2015 the civil service hired well over 500. This year it expects to take on about 750 apprentices, roughly the same number as its "fast stream" graduate programme. Of its first intake of apprentices, 95 per cent

passed. Many are working in Whitehall ministries and four have switched to the graduate stream. Among them was Daniel Thrower, 20, who applied after finding out about civil service apprenticeships via a tweet by David Cameron. He started in a human resources role and on

# A growing sector and a viable alternative to university

**GREG HURST**  
EDUCATION EDITOR

Opportunities for high-status apprenticeships in the professions and leading industries are opening up fast. Some involve studying for a university degree or equivalent professional qualifications, but the market for higher level and degree apprenticeships — which we focus on in this supplement — is relatively new and still small.

David Cameron and his ministers love to talk up the numbers: three million apprenticeships within five

years; 500,000 new apprentices last year. These figures count people starting apprenticeships, not completing them; 31 per cent drop out. There will be double-counting: people who do one apprenticeship and move to another. The vast majority are lower level apprenticeships, often filled by older workers.

Of 499,900 people who started apprenticeships last year, 298,300 were at level 2, equivalent to five good GCSEs; a further 191,800 were at level 3, equivalent to two A-level passes. Just 19,800 were at level 4, on a par with a foundation degree, or above. More than

two fifths were started by workers aged at least 25, and almost a third by people aged 19-24.

There's nothing wrong with employers retraining staff or teaching them new skills, which should improve productivity, but many associate apprenticeships solely with young people learning a trade for the first time; this is not the reality of the government's policy.

The number of school-leavers starting higher or degree apprenticeships last year was tiny — only 1,100, with a further 4,200 taken up by apprentices aged 19-24. This is dwarfed by the 201,675 people in England aged 18 who

were accepted to university. A better comparison is with the 18,818 graduates hired last year by Britain's top 100 graduate employers, although, unusually, recruiters were left with 1,074 unfilled positions when applicants accepted multiple offers before making a late decision on which to take.

There is every indication that these types of elite apprenticeship aimed at school-leavers will expand rapidly as employers see the benefits of hiring cheaper trainees they can develop for specialist roles and apprentices gain qualifications and work experience while earning. The apprenticeship levy,

raising £3 billion from larger employers from April next year, will force organisations to think harder about how they deploy apprentices in their business.

In some circumstances young people who complete elite apprenticeships are projected to earn more over their working life than graduates of non-selective universities. Modelling by Boston Consulting Group for the Sutton Trust charity found apprentices with a level 5 qualification would earn £1.4 million over their lifetime, below that of an Oxbridge or Russell group university graduate but fractionally ahead of other graduates.



TIMES PHOTOGRAPHER RICHARD POHLE, ALAMY

The civil service's higher-level apprentices include Conor O'Connor, right, and Daniel Thrower, far right, whose work has taken him to the House of Commons, left. Rolls-Royce, below, is another large recruiter



finishing was promoted to be a higher executive officer with the Department for Work and Pensions, in a policy team responsible for employment and support allowance, the main disability benefit for people out of work. His ambition is to work in a minister's private office and run a department as a permanent secretary. "I have loved it," says Daniel. "If it wasn't here and I wasn't doing it, I

would have had a job but I couldn't have said I had a career." Another was Conor O'Connor, 20, who wanted to be a pharmacist before developing an interest in government and politics. He was placed in the Department for Education, working on tests of school standards and education in Britain's overseas territories. He now works in its delivery unit, monitoring performance and risk.

"I applied thinking it would be relatively low-level work but I was surprised," says Conor. "I was given lots of responsibility from day one." James Norton, who runs the apprenticeship and graduate recruitment schemes, says the civil service offers unique opportunities to ambitious young people who want to make a difference to Britain. "This is part of a

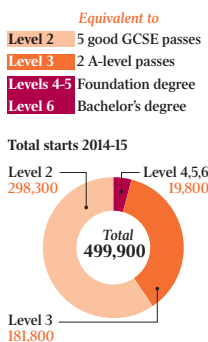
sustained plan to provide a genuine alternative entry route for young people who don't necessarily want to go to university but want to build and develop a career within the civil service," he says. "Our hope is one day that one of the people who joined through the fast-track programme does become a permanent secretary and we have put the things in place to support that, so there is no limit to ambition."

THE TIMES GUIDE TO HIGHER & DEGREE APPRENTICESHIPS

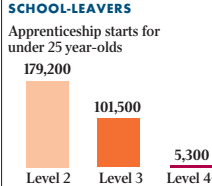
Available programmes	Typical roles	Starting salary	Length of training	2015 recruits	
<b>Civil Service</b> Public sector	HA	Commercial, finance, technology, project delivery	£19,000+	2 yrs	564
<b>PWC</b> Accountancy & professional	HA, SD	Assurance, consulting, deals, tax	£20,000+ (London HA)	2-4 yrs	319
<b>KPMG</b> Accountancy & professional	HA, SD	Audit, tax, advisory	£15,600 -£21,500	3-6 yrs	227
<b>Army</b> Armed forces	SD	Army Officer	Bursaries up to £7,000	3-4 yr degrees	150
<b>Jaguar Land Rover</b> Engineering	DA	Engineering, finance	£18,550	6 yrs	154
<b>Deloitte</b> Accountancy & professional	HA	Audit, tax, consulting, financial advisory	Competitive	5 yrs	125
<b>BAE Systems</b> Engineering	HA, DA	Engineering, software development, project management	Competitive	4-5 yrs	121
<b>EY</b> Accountancy & professional	SLP	Audit, advisory, transactions, tax	£21,500	5 yrs	110
<b>Lloyds Banking</b> Banking & finance	HA, DA	Banking, marketing, finance, IT, business management	£20,000-£24,550	3-4 yrs	97
<b>BDO</b> Accountancy & professional	HA	Audit, tax, advisory, financial services	Competitive	5 yrs	95
<b>Grant Thornton</b> Accountancy & professional	SLP	Advisory, assurance, tax	Competitive	5 yrs	85
<b>BT</b> IT & telecoms	HA, DA	HR, customer services, finance, engineering, IT	£14,400-£18,000	3-5 yrs	84
<b>Cappemini</b> Consulting & tech	DA	Software engineering, finance, consulting, data analytics	£16,000	4.5 yrs	76
<b>JP Morgan</b> Investment banking	HA	Finance, technology	Competitive	18 months or 4 yrs	72
<b>Barclays</b> Banking & finance	HA	Finance, audit, leadership, relationship management	Competitive	3-4 yrs	55
<b>AECOM</b> Engineering	HA	Engineering, architecture, surveying, construction	Competitive	2-3 yrs	52
<b>Rolls-Royce</b> Engineering	HA, SD	Manufacturing, engineering, supply-chain, accounting	£11,800-£12,900	3.5-5+ yrs	50
<b>IBM</b> Consulting & tech	HA, DA	Technical solutions, business	£15,000	3 yrs	50
<b>National Grid</b> Engineering	HA, SD	Engineering, information systems, project management	£23,500	2 yrs	48
<b>GCHQ</b> Public sector	HA	IT, software engineering, internet, telecoms	£17,500	2 yrs	43
<b>Accenture</b> Consulting & tech	HA	Client delivery, operations, testing, service management	Competitive	3 yrs	42
<b>RSM</b> Accountancy & professional	SLP	Assurance, tax, audit, accounting, outsourcing	Competitive	3+ yrs	39
<b>Unilever</b> Consumer goods	HA	Business, technology, research & development	Competitive	3-6 yrs	37
<b>Royal Navy</b> Armed forces	SD	Royal Navy officer, Engineering officer	Pay up to £5,500 pa	3-4 yr degrees	35
<b>Vodafone</b> IT & telecoms	HA	Technology	Competitive	2 yrs	30
<b>Siemens</b> Engineering	HA	Engineering, design, IT, technical sales, finance	Competitive	2-4 yrs	27
<b>Airbus</b> Engineering	HA, DA	Engineering, manufacturing, finance, supply chain	£14,300	3 yrs	26
<b>BBC</b> Media	HA, SD	Business management, IT, broadcast engineering	£11,500-£23,000+	2-3 yrs	25
<b>Tesco</b> Retail	HA	Retail management, fashion, technology, commercial	£18,000-£20,000	2-3 yrs	23
<b>Thales</b> Engineering	HA, DA	Project management, software, engineering, accounting	Competitive	2-4 yrs	20

HA higher apprenticeship, DA Degree apprenticeship, SD Sponsored degree, SLP School leavers programme Copyright: High Fliers Research

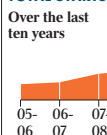
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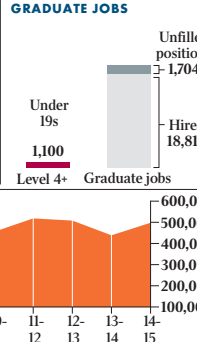
NOT JUST FOR SCHOOL-LEAVERS



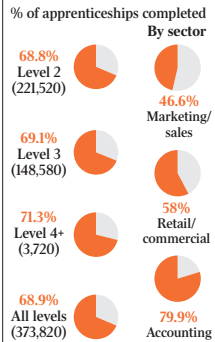
TOTAL STARTS



APPRENTICESHIPS V GRADUATE JOBS



COMPLETIONS



HOW THE TABLE WAS COMPILED

The independent market research company High Fliers Research contacted more than 200 employers of school-leavers, graduates and young professionals in December to confirm how many higher apprentices (HA) or degree apprentices (DA) each organisation recruited in the previous 12 months. The research identified the number of training places available at each employer in 2015 for sixth-form school-leavers on apprenticeship programmes that lead to level 4 qualifications or above. Where employers offer their own training schemes outside the formal apprenticeship framework —

by providing their own degree courses at university, by sponsoring places on existing undergraduate courses or through programmes leading to recognised qualifications — these were also included within the organisation's recruitment total. Programmes aimed at 16-plus school-leavers leading to level 2 or 3 qualifications are not included. The 30 organisations that recruited the largest number of sixth-form school-leavers for higher or degree apprenticeships, or comparable training schemes, in 2015 offered a total of more than 2,800 places.



# 04 | GUIDE TO ELITE APPRENTICESHIPS AN ALTERNATIVE TO UNIVERSITY

Q&A

## On the right path: Should my child pick an apprenticeship?

**The new crop of training options leaves questions to be answered, says Greg Hurst**

**Are all apprenticeships the same?**  
No, they are very different. Each industry designs its own training elements to make them meet employers' needs in that sector. More importantly, there are different grades of apprenticeship so applicants should take care to ensure they are applying to a position that takes them beyond their current qualifications. A teenager with good A levels should look at apprenticeships at level 4 and above; at the minimum they should use a level-3 apprenticeship as a stepping stone to level 4.

**How long is an apprenticeship?**  
Many apprenticeships involving professional training or specialist skills last two years or more; degree apprenticeships can take five years. The legal minimum for an apprenticeship is now one year. Apprentices work for at least 30 hours a week. The role combines learning on the job with education or training, usually equivalent to one day a week but often done as several weeks' "block release".

**Is an apprenticeship a qualification?**  
Yes, an apprenticeship certificate will be awarded at the end by the awarding body, if the apprentice completes it to the employer's satisfaction. However, apprentices will also study for at least one professional, industry or educational qualification as part of their training, which the employer will pay for. This is awarded separately on the basis of exams or other assessments.

**How much are apprentices paid?**  
Apprentices have a special rate in the minimum wage, but employers can pay above the minimum and many will do so for higher, skilled apprenticeships. The basic rate is £3.30 an hour for apprentices aged 16-18, plus paid holidays, which rises to the youth national minimum wage of £5.30 once they reach 19.

**What happens at the end of an apprenticeship?**  
The big advantage is that an apprentice will already have worked for the employer for an extended period and so is likely to be kept on in a new role — that's why employers hire and train apprentices. If not, or if the apprentice wants to move on, they will have a couple of years of work experience, industry contacts and qualifications, and so should be in a strong position to find a job.

**What about long-term career and salary progression?**  
In theory there should be nothing to stop an apprentice being promoted in the same way as a graduate: most employers operate as a meritocracy. This is especially the case if a further professional qualification is required. Graduates may have a wider network of professional friends from university but apprentices will have worked in a business for longer and developed contacts that way.

**How do I find an apprenticeship?**  
Apprenticeships are offered directly by employers, who advertise them as they do other jobs. There is still an information gap in finding good independent advice — as well as information about apprenticeship openings. There are some websites, including that of the government's National Apprenticeship Service, for which you must create an account.



Executive headteacher Carl Ward with

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some of his pupils at the Haywood Sixth Form Academy in Staffordshire

## OPINION

## We're making the sixth form of the future

**CARL WARD**  
HEADTEACHER

Imagine a school where students could choose a sixth-form programme that prepares them for an apprenticeship. A school where they would have the best careers information, a focus on employability skills and access to hundreds of businesses — even a curriculum guided and built by employers. That's what has been created at Haywood Sixth Form Academy

(HSFA) in Stoke-on-Trent — the first of its kind in the country. Situated in a Victorian town hall, the school is a groundbreaking project with a personalised student curriculum; a purpose-written employability qualification; a steering group of businesses to teach employability skills; and hundreds of businesses offering work-based learning programmes. These are offered alongside traditional A levels and technical qualifications.

Given the government's plans for significant growth of apprenticeships, could this offer a glimpse into the sixth forms of the future?

When our team at HSFA was deciding how to go about setting up a work-based learning programme, it became obvious that the pathway to apprenticeships offered much confusion. There were many sources of information — one might say information overload — but no "one-stop shop" that provided clarity.

Our response was to reinvent the traditional sixth-form route and

create a programme that gives students the skills they need for the world of work. With dedication and effort, mixed with a pinch of resource, we have a solution fit for students and for businesses. Our first student has recently moved from this route to secure an apprenticeship.

Schools are complex organisations, with students who have complex needs. The gap between the employability skills that students possess and the requirements that businesses have cannot be closed by the straight introduction of apprenticeships. We need a new way of thinking. Building strong working partnerships with training providers has been key to the success of our apprenticeship options. Students can taste the world of work, decide on the pathway they wish to follow and work with providers to move on to apprenticeships in that area.

Another aspect that is vital to the post-16 welfare of students is the provision of high-quality careers information, guidance and advice in schools. At HSFA we have employed a careers officer to explain the full range of options to students.

Some further education colleges say that sixth forms encourage students to stay on for financial reasons and don't encourage them to "spread their wings" and learn in a different setting. Such advice helps to address this criticism. Getting the provision of careers information, advice and guidance right will be vital to the success of the government's new higher-level apprenticeship programme.

Students, including those who are predicted top grades in their A levels, should have a real choice between higher-level apprenticeships and the traditional university route. There is no doubt that the economy needs more high-achieving technical apprentices to compete in the global marketplace.

Often, however, students do not yet have that genuine choice and are funnelled into a university route that may not fit their aspirations. HSFA has proved that when students have a real choice of routes, when they are informed and have experience, they will often choose the higher technical route over the traditional university route.

*Carl Ward is executive headteacher of Haywood Sixth Form Academy, chief executive of the City Learning Trust and a member of the Association of School and College Leaders' national council*

## REPORT

## A daunting decision at an early age

**MARTIN BIRCHALL**

For sixth-form school-leavers, particularly those likely to get top A-level grades, higher or degree apprenticeships can seem a tempting alternative to university. They offer a debt-free and, in some cases, faster route to becoming a chartered accountant, a professional engineer, or IT specialist.

However, there are more significant differences in these two career paths than the cost of university tuition fees or the perceived value of a degree versus an apprenticeship. More than three quarters of school-leavers who opt to study for a degree have little idea what

they want to do after graduation. Alongside their studies, they have three or four years to research and reflect on careers that interest them.

Extracurricular university life can help develop personal skills and abilities that employers look for and give students the chance to try specific roles before they apply for their first graduate job. Employers have long supported this process of experimentation and discovery. Recruiters are looking for applicants who not only have a strong academic background but can demonstrate real commitment to the type of employment they are applying for and have CVs that include a range of experiences and employability skills.

For those starting an apprenticeship straight from school, the decision about which career to pursue comes far sooner. Few people grow up wanting to be a "tax consultant", a "technical solutions analyst" or a "client delivery manager" and yet the specialist nature of higher and degree apprenticeships means sixth-formers need to commit to training for a very specific job role. Without substantial careers guidance, many school and college-leavers may struggle to make the right decision about their future careers at such an early stage.

*Martin Birchall is Editor of The Times Top 100 Graduate Employers and managing director of High Fliers Research*



Production at the BMW Regensburg plant, which employs 300 apprentices

## THE GLOBAL VIEW

## What we can learn from the German way

**PETER LAMPL**  
CHAIRMAN, THE SUTTON TRUST

Working for Siemens in Germany in the Seventies, I was struck by one stark difference with Britain: apprentices were as valued and as valuable as graduates. Culturally, they enjoyed the respect not only of employers, but of parents, students and teachers.

Revisiting Munich more recently, I met young apprentices — mainly preparing for white-collar careers — who were being taught all aspects of their company, training as skilled professionals. Most will work for the company after three years of learning, and some will do a degree in company time.

The German system (and Austria and Switzerland take a similar approach) has a number of key features, according to a Boston Consulting Group report for the Sutton Trust. First, apprenticeships are led firmly by employers, who maintain their quality. Second, they typically last three years and are to a standard equivalent to our A levels, or higher. Third, they are standardised so a common core is preserved, ensuring that an automotive engineer in Stuttgart can easily work for a rival carmaker in Munich.

To be fair to the government, the system here is getting better, although we are still a long way behind most European countries. Employers are more in charge of setting standards, though six in ten apprenticeships are only to GCSE level, and one to two years is the standard duration.

The Dutch and Australian systems are more college-based. The advantage of an employer model, however, is that it develops the sort of social skills that recent Harvard University research has shown to be increasingly valued in the workplace. Young people still take time out to go to college. Moreover,

*An engineer at the Mercedes AMG factory in Affaltenbach, Germany*

the German system has much stronger public buy-in than here. Polling for the Sutton Trust has shown reluctance among teachers and parents to embrace apprenticeships as a valid alternative to university. Yet Boston Consulting Group analysis shows the lifetime earnings from a good apprenticeship can outstrip degrees, because you earn as you learn and don't build up with substantial student debt.

There is a clear path from school to apprenticeship, making it as valid a choice for school-leavers of all social classes as university. There are differences, of course, in the German school system, and we should guard against repeating less welcome aspects. Students are tracked through one of two routes, with fewer than one in three tracked on a university route. After criticism from the Organisation for Economic Co-operation and Development, education has been made fairer for disadvantaged and ethnic minority children who were losing out.

It is not perfect, of course. While the system has a gold standard in quality for apprenticeships, this can impose constraints that make it hard to adapt to new digital industries.

Yet there is still much to learn from a system where employers embrace apprenticeships for strong economic reasons. Youth unemployment, at 7 per cent, is the lowest in Europe and compares with 14 per cent here.

Crucially, German companies see the apprenticeship as a way of building talent, not something for strugglers who fail at school.

With 20,000 higher apprenticeships and a small but growing degree apprenticeship route, we have the chance to create real choice between university and an apprenticeship in Britain. Though it will only gain real traction if government and employers demand a German standard.

*Sir Peter Lampl is also chairman of the Education Endowment Foundation*



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## EMMA LEE-POTTER

The big four accountancy firms are leading the way in recruiting bright, ambitious school-leavers who want to launch their careers early rather than go to university. Employers say that 18-year-olds who start work straight after A levels are often more focused and motivated than graduates who join in their early twenties.

"School-leavers have a 'can-do' attitude and want to demonstrate that that they are just as good as graduates," says Sharon Spice, director of global student recruitment at the Institute of Chartered Accountants in England and Wales (ICAEW).

"I've also heard that those who come via the school-leaver route tend to be more loyal and keen to stay with their firms after they qualify because they appreciate the belief employers showed in them early in their careers."

Over the past four years PwC has quadrupled its recruitment of school-leavers. The firm recruited 165 school-leavers in 2015, the majority joining PwC's higher-apprenticeship scheme to work in tax, consulting, assurance or deals. The starting salary for PwC apprentices in London is about £20,000, compared with £28,000 for graduates. Once they have qualified, there is no distinction between the apprentices and the 1,500 graduates the firm hires each year — and no limits on how far they can progress.

PwC's higher apprentices need at least the equivalent of three Cs at A level (240 Ucas points) to work in tax and slightly higher (280 Ucas points) to work in consulting, assurance or deals. They have the potential to qualify four years after joining the company — faster than the graduates, who spend three years at university, followed by three years of work and study.

"We have found that apprenticeships are an incredibly powerful way of recruiting good talent," says Richard Irwin, PwC's head of student recruitment. "The higher apprentices have an exceptional enthusiasm to progress. Within three or four years of joining us apprentices and graduates are indistinguishable from one another."

Deloitte, another of the big four accountancy firms, has also expanded its apprenticeship programme. Two hundred school-leavers will join its BrightStart business apprenticeship scheme in September and the number is likely to grow.

"There isn't one right career path for everybody and we want to offer as many routes into Deloitte as possible," says Victoria Lawes, director of resourcing at Deloitte. "Our apprenticeships are spread across audit, tax, consulting and financial advisory and the majority will go on to study for a professional qualification as part of their apprenticeship."

Some choose the apprenticeship route to avoid student loans. Others would rather earn while they study for qualifications. Many apprentices live at home, enabling them to build up savings and get on the property ladder before their peers do.

"The challenge for large employers is to ensure that we have a variety of entry routes that attract and nurture a



JOONEY WOODWARD FOR THE TIMES

## CASE STUDY

### There's a direct link between my learning and my role

**N**diwe Rocque took A levels in English, history and politics at LaSWAP, a sixth form centre in Camden, north London, and intended to study English literature at university. The idea of getting on the career ladder earlier was more appealing, however. She applied for a place on PwC's higher apprenticeship programme and joined its tax department as a trainee associate in 2014.

Ndiwe, 22, who is based

at PwC's London Bridge office, is due to sit the second part of her Association of Taxation Technicians (ATT) exams in May. She plans to stay at PwC and hopes to qualify as a chartered accountant in two or three years.

She says: "My school was very university driven and apprenticeships weren't so talked about. I started doing my own research and liked the idea of working full-time, earning a salary and studying towards a professional qualification. It felt like a winner to me."

"I didn't have any in-depth knowledge but no one expects you to be a tax expert straight from school. I'm constantly learning and acquiring new information. Everything we work on relates to what we are studying and you see the impact of what you have learnt straight away. When

you are at school doing maths you wonder how it will help you later on, but in my job there is a direct link between what I'm learning and my day-to-day role.

"I don't feel I've missed out by not going to university. The hardest thing is when your friends come down for the holidays and want to go out and have fun while I have to stay in, revise for exams and be in work on Monday morning. But then again, I was able to go on a two-week holiday travelling around Cuba last summer. It was very satisfying paying for it out of my own pocket."



## CASE STUDY

### I had three-year head-start

**R**ob Walker, 37, is a tax partner at PwC and leads the firm's real estate tax network in the UK. He played football for England's under-18 team, combining sport with A levels at Holyrood Community School in Somerset. He planned to go to university to study economics but, after a summer internship at PwC at the age of 18, he was offered the chance to stay on, take his accountancy qualifications and work his way up.

Rob, left, has worked at PwC's London offices for nearly 20 years. He spent two years on secondment in Paris,

leading the firm's European real estate practice, and has also worked in the US and the Far East.

"Joining as a school-leaver gave me a three-year head-start on my peer group. The challenge is that while you're studying for exams you're also doing client work. It was an ambition of mine from day one to make partner and I feel that those first three years of developing my networks really helped me."

"Hardly anyone has ever asked me if I have a degree. People ask about your level of experience and the projects you have worked on and that's what gives you the credentials you need in the market."

diversity of talent," says Michael Walby, director of professional qualification training at KPMG. "We give young people an assurance that whatever choice they make, they can still find ways into our organisation and into becoming a leader in our firm."

KPMG hired 228 school-leavers last year. Of these, 118 trained for audit work by taking a degree at Birmingham or Durham while 110 joined the KPMG

360° apprenticeship programme. KPMG 360° runs for three or six years. During the first three years, apprentices rotate between KPMG's audit, tax and advisory teams. After that, some remain at technician level while others specialise and study for a professional qualification such as the ACA, the ICAEW's chartered accountant qualification.

EY (formerly known as Ernst &

Young) has 200 people on its five-year school-leaver programme and plans to recruit another 100 this year. The school-leavers spend two years working with clients and studying finance and business, then three years working towards a qualification in assurance, transactions or tax.

Maggie Stilwell, EY's managing partner for talent, says the company firm is impressed by the determination

and work ethic of the school-leavers.

"We have a lot of wonderful graduates who are motivated, focused and hard-working but there is something special about the school-leavers, a level of maturity and confidence and a desire to really get this right," she says. "We are watching them very carefully but all the signs are incredibly positive, which is why we want more and more of them."

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**TECHNOLOGY**

**INTERVIEW**

# We may hire more graduates now, but not for much longer

Apprenticeship programmes have never been so important

**GREG HURST**  
EDUCATION EDITOR

Big employers will soon hire more apprentices than graduates as they are forced to shift their training priorities, a leading businesswoman has predicted.

Christine Hodgson says the government's decision to transfer the cost of expanding apprenticeships to employers will have profound ramifications. An apprenticeship levy of 0.5 per cent of payroll costs will be charged to British employers who have payrolls above £3million from next year, raising £3billion annually.

Hodgson, who chairs the technology company Caggemini UK, says people are starting to understand its significance. "We will very soon take more apprentices than we take graduates and I think with the apprenticeship levy that will become the case everywhere," she says. "When you have got half a per cent of your payroll cost going into apprenticeships it means you really have to re-think what apprenticeships mean to your business."

Large employers will still need to recruit graduates, however this will be overtaken by apprenticeships. Another consequence, she predicts, will be closer links between employers and universities to align vocational degrees more closely to relevant industry skills, and boost graduate employment rates.

Caggemini UK hires about 100 school-leavers a year for its five-year degree apprenticeship. "Like many

professional services firms, we had never opened our eyes to anything other than graduates," says Hodgson. "At least five years ago we saw an opportunity to start bringing in apprentices and we got the rest of the industry together and created a template. We started doing advanced apprenticeships at 16 but now we focus very much on 18-year-olds, higher and degree apprenticeships. We offer young people a five-year apprenticeship, which then goes into employment.

"We train them ourselves, we put them on real client work, we link up with Aston University and they study for a degree, and from the age of 23 they come out with a BSc and five years' work experience and no student debt."

Once they have their degree, apprentices are treated in the same way as graduates. "There is absolutely no differentiation. It is meritocracy," she says. Hodgson says some apprentices feel a strong loyalty to the company for giving them their career break, whereas graduates finishing their training know their market value to other employers.

"My hypothesis is, if we captured young people at 15, recruited at 18, give them this great training, I have a feeling they might be less inclined to jump to the highest bidder," she says.

On several occasions, Hodgson has taken Caggemini apprentices with her to school careers events, and found that teenagers — and their teachers — knew very little about apprenticeships.

This is the challenge Hodgson faces in her other role as chair of the Careers

& Enterprise Company, which was set up last year by the government to transform careers advice and broker links between schools and employers. Employer engagement with schools is patchy, rated weak in the Black Country and Cornwall and strong in the Thames Valley and Warwickshire. Even when businesses are keen to work with schools, lack of coordination means teachers can face a "blizzard" of 30 emails a week from different organisations.

Her solution is to recruit a network of volunteer "enterprise advisers", one per school, to channel all contact between employers and head teachers, and help inform curriculums, business contacts and careers advice. A key element will be encouraging employers to go to schools to talk about apprenticeships — and take apprentices with them.

"We programme young people to think that success is going to university. We need to dispel the attitude that apprenticeships are second-rate. This is deep-rooted in the fact that people thought it was all about low-level jobs. Now there are degree apprenticeships for people who didn't previously look at apprenticeships, in firms like ours."

Hodgson says the apprenticeship levy should help because, once employers pay large payroll taxes, they will seek a return with more publicity about the openings for apprentices. There could be unintended consequences, with an incentive to cut payroll costs.

"Where we have got to be a bit careful is it doesn't lead to more of a drive for offshore resources," Hodgson warns.

**CASE STUDY**

## You still get a degree — but without the debt

Alycia Bohannon turned down a place at the University of Bath to start a degree apprenticeship at Caggemini. She left school with A-level grades AAB. "I was always a nerd in the IT class — I spent most of my lunchtimes in there," she says.

Alycia, now 20, was set to study computer science and business, but deferred her place

for a year. "I had so many friends who had gone to university and found it hard to get a job when they finished. I typed 'IT apprenticeships' into Google and Caggemini was the first one that came up."

She applied and told one of her teachers, who advised her not to accept it. "He said, 'Don't do it — apprenticeships are for people who can't get into university.' I have explained how well things have gone, and he has changed his mind."

Three months after leaving school Alycia started at Caggemini. She chose to specialise in digital and mobile technology, and joined the business analyst team, working on digital customer experiences.

She then began supporting a key client in the automotive industry, and ended up jointly leading its mobile technology and app development teams.

In March she will start a BSc in digital and technology solutions via Aston University: two evening classes a week with full-time work, and exams.

"It is difficult to do it," Alycia says, "but the other side is that you have no debt and you come out with five years' experience in a great organisation with a degree."

Does she regret turning down her place at Bath?

"I regret not having a student life," she says.

"If I go home at the weekends and see some of my friends who are back from university, I am knackered from the week. I just want to sleep."

"They had the uni life and I went straight into suits. I have always been the youngest one in my team but I have had lots of really great mentors and been really lucky. I love it."



**REPORT**

# How tapping into young talent pays off

**JAMES HURLEY**

Three years ago the mobile payments company Bango faced a challenge that is common among fast-growth technology businesses: it needed to hire a skilled workforce to support its rapid expansion, but without paying sky-high salaries.

Though the solution — to hire apprentices — was straightforward enough, it is a surprisingly unusual approach for the sector.

The scheme was the brainchild of David Keeling, Bango's chief operating officer, but it was championed by the company's founder and chief executive, Ray Anderson, who'd been an apprentice at Leyland Trucks in the 1970s.

He went on to study physics at Cambridge, taught by Professor Stephen Hawking. He switched his degree to computer science, a subject he had first become interested in during his Leyland apprenticeship.

His technical background certainly stood him in good stead for a career that has seen him start up and sell a number

of technology businesses. He started Bango in 2000. By the time Keeling joined in 2013, Bango, like many high-tech businesses in the Cambridge area, was facing a skills shortage.

"We were wrestling with the question of how to build a team which really knows what our platform does, and has all the expertise and credibility of those people, but not end up spending a fortune," Anderson says.

Opting for apprentices — AIM-listed Bango has 12 out of a staff of 60 — has brought it new dynamism, says Keeling. "Their attitude is excellent: they're hungry to learn and very inquisitive."

Tanya Spittle, 20, who is a first-line engineer and a level-4 apprentice, says apprentices can be better at using their initiative than some graduate recruits. "We're all proactive with our learning. If we want to know something, we go and find it out — we don't wait for the information to come to us."

After studying for a BTEC in computer sciences, Spittle was keen to use her skills rather than spending more time in the classroom. And a Bango apprentice salary of £12,000 was also a draw.





ABOVE AND BELOW: MICHAEL LECKIE FOR THE TIMES



**Tanya Spittle, above, is a level-4 apprentice and first line engineer at mobile payments company Bango. Its founder, Ray Anderson, left, championed apprenticeships as a result of his own experience at Leyland in the 1970s**



REX FEATURES

Google says it has identified a "gap in the market" for higher-level apprenticeships. Its

apprentices spend 80 per cent of their time in the company's London headquarters

# Tech companies are slow to realise training potential

**JAMES HURLEY**

For an industry whose executives regularly warn of skills shortages and perceived failures of the education system, the technology sector appears remarkably uninterested in apprenticeships.

The number of those starting IT apprenticeships dropped by a third in 2014 to 13,060. Over the same period, demand for places trebled. There is evidence, however, that some employers are changing their attitudes.

A number of companies are looking at degree-level apprenticeships to recruit more talent. In September last year, 40 businesses joined a government scheme to hire IT apprenticeships in partnership with universities.

Phil Jones, the managing director of Brother UK, said some employers have been "caught out" by the emerging challenges of the labour market. "The issue in the sector is the sheer pace of change," he says. "It is probably only in the past few years that tech firms have got on the front foot by creating more apprenticeships."

Brother has a target to increase the number of apprenticeships to represent 5 per cent of the company's headcount, as it looks to tackle sector-wide issues such as an ageing workforce.

Google defines candidates for its higher-level scheme as "18 to 23-year-olds who didn't want to go to university, but who wanted to improve their skills in a working environment".

Apprentice digital marketers work in the company's London office for 80 per cent of their time, with the remainder spent with Arch, the formal training provider. "Our apprentices have been

able to approach challenges in new and often innovative ways," says Carli Gooch, head of Google UK's apprenticeship programme.

Google's scheme, however, is very small — hiring only 12 each year. Many of the other blockbuster names in the industry have limited programmes too.

Tim Walker, the managing director of Hampshire-based IT services provider, Taylor Made Computer Solutions, says much of the industry has found it comfortable to hire experienced consultants in recent years, meaning the training of young people has been neglected.

His company's formal apprenticeship programme is resulting in a higher retention rate than among traditional graduate recruits.

"We employ people from the region who have ties to the area and are more likely to develop and grow with us than they are to move on," he says.

Tom Roche, who runs UK apprentice and graduate programmes at Fujitsu, says tech companies without apprenticeship schemes are missing out. He says 70 people join the UK arm of the business each year as apprentices, with a 96 per cent completion rate.

"Many academically able individuals are choosing not to go to university for a variety of reasons ... [but] still have the same potential from a professional point of view," he says. "Our apprenticeship scheme has provided some of the best talent in the organisation, with former apprentices now holding senior positions."

If the government is to meet its target of three million apprenticeships by 2020, more industry giants will need to heed that approach.

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**FINANCE**

# Interest high in banking recruits

Why big names are putting their money into nurturing young talent

**NEIL JOHNSTON**

Big banks are turning to school-leavers for specialist roles as driven young apprentices fill a “skills gap” created by broad university degrees.

Thousands of students go to university to study business or economics, unsure which area they want to work in. Those joining apprenticeship programmes tend to be much more certain about what they want to do, which impresses employers.

Chris Jackson, the talent director at Lloyds Banking Group, says apprenticeships are popular for those “really clear about their career aspirations” and this provides the bank with a “pipeline of specialist talent”.

Apprenticeships help to fill a skills gap in special areas, such as the provision of mortgage advisers, where there is a “limited” pool of talent coming out of universities, according to Mike Thompson, head of apprenticeships at Barclays.

In the past, banks have focused on lower-level apprenticeships, and while there are still hundreds of places available on these, they are now devel-

**ROUTES INTO BANKING**

● **Barclays leadership and management programme:** three year apprenticeship; leading a team of 15 in final year; degree from Anglia Ruskin University

● **Lloyds finance higher apprenticeship:** financial analysis, reporting and stakeholder management; Chartered Institute of Management Accountants qualification Salary: £21,996

● **JP Morgan IT degree apprenticeship:** four years; technology and financial services

● **Lloyds apprenticeship in relationship management:** level 6; financial analysis, products and services and building a professional network Salary: £21,330 - £23,700

● **Barclays internal audit higher apprenticeship:** three years; working with a global team; Chartered Institute of Internal Auditors qualifications

● **JP Morgan financial services higher apprenticeship:** level 4; 18 months; NVQ in providing financial services

oping level 4 qualifications or higher for school-leavers. Some of the top roles have entry requirements similar to a Russell Group university and gaining a place is highly competitive.

A level 6 apprentice banking relationship manager with Lloyds, for example, needs the equivalent of BBB at A level (300 Ucas points) whereas some of the bank’s level 4 roles require CCC (240 points).

Thousands applied for 100 higher-level apprenticeships at Lloyds. Barclays, which had 55 higher apprenticeships, had an application rate of 30 candidates per place. Candidates face a rigorous assessment process of an online questionnaire and tests, telephone interviews, and a day at an assessment centre for higher-level apprenticeship applicants.

Hiring apprentices for specialist roles means there may be less rotation than with a graduate scheme but, according to Jackson, this “expedites your career”.

He says: “For a talented individual who comes into a higher apprenticeship from school there is no reason why they can’t be more advanced than a graduate in the same timeframe if they work hard.” Roles include personnel,

IT and marketing, as well as areas usually associated with City firms such as insurance, investment banking and finance. Salaries range from £18,000 to £24,000, depending on the bank, role and level, with the highest wage for level 6 apprenticeships such as those offered by Lloyds.

Here, apprentices study for a degree, such as in IT, or an equivalent professional qualification such as a chartered banker diploma, with fees paid by the bank. At Barclays apprenticeships include qualifications awarded by industry bodies or a university for degree apprenticeships.

Banks are hoping to achieve a return from a new generation of “loyal” employees through their support. At Barclays each apprentice has a personal coach. The result is a low drop-out rate.

Thompson concedes that apprenticeships will never be able to replicate university life but they create “a very challenging experience” producing “marketable individuals”.

And while landing the first role may be difficult, once apprentices are in the door, the main competition is from managers vying to sign them up to their department.



Rachel Guy, who embarked on an

**50**

**20**

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apprenticeship in banking, enjoys having more disposable income than friends who chose to go to university

PHOTOGRAPH BY MICHAEL LECKIE FOR THE TIMES

**CASE STUDY**

**I have more fun than my friends do**

Rachel Guy had always assumed she would go to university. However, she went against the advice of her teachers at Penistone Grammar School, near Barnsley, to apply for an apprenticeship with Lloyds after deciding to go into marketing.

"I didn't enjoy just learning to pass exams," she says. "I wanted to have skills that I can actually use in a working environment."

Rachel, 20, started her apprenticeship as her friends went on to university, but has no regrets and now feels more secure without a large student loan. "I feel like I'm a step ahead because I can start thinking about my future. I don't have that debt."

Rachel started in the bank's digital team and now works in mortgages. She has been impressed with

the support she has received, and the responsibilities handed to her. With just a year's experience, she has already taken charge of her own advertising campaign.

Although she feels she has been "thrown in at the deep end" in comparison to sixth form, and the hours can sometimes be long, she says it is worth it.

"I'm going to have two years' experience at the end of this," she says. "It's brilliant."

As for the student experience of university, Rachel doesn't believe she is missing out. In fact, she thinks she may be having more fun than her schoolmates.

"I can actually go out more than my friends who are at university because I have the disposable income to do that. And I can see them at weekends, so I'm not any worse off."



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## 12 | GUIDE TO ELITE APPRENTICESHIPS LAW

# A return to the days when solicitors learnt on the job

**FRANCES GIBB**  
LEGAL EDITOR

A revolution that will open the legal profession to people without financial support or a degree begins this autumn.

New apprenticeships will let candidates qualify as paralegals, chartered legal executives or solicitors without the costly hurdles of a degree, the one-year vocational training course and a two-year training contract. Instead, they will learn on the job, returning to the days when most solicitors qualified after training as articled clerks.

The law became a mostly graduate profession only in the past 40 years, closing the door to entrants without degrees or means to raise the finances.

For solicitors, the new route will take five to six years and is level 7, equivalent to a master's degree. Apprentices will need at least five GCSEs, including maths and English, at grade C or above, and three A levels or equivalent.

Critics, led by the Law Society, have warned that the move risks diluting standards. However, the Solicitors Reg-

ulation Authority has welcomed the new apprenticeship route as a way of increasing diversity in the legal profession.

Gun Judge, resourcing manager of Addleshaw Goddard, who chairs the apprenticeships legal committee, said recently that the scheme would open doors to a "more diverse talent stream". She says: "Our apprenticeships create a huge contribution to the firm and we will be looking to hire more."

Apprenticeships already exist in the profession, run by 20 City firms and employers such as the Government Legal Service and the BBC. These lead to qualification as a chartered legal executive, a lawyer licensed only for specific areas. A solicitor is qualified across all areas. There are 420 legal apprentices on levels 3 and 4, according to the Chartered Institute of Legal Executives (CILEX).

New chartered executive apprenticeships, set at level 6 or equivalent to a bachelor's degree, will take five years with an exam or case study at the end rather than along the way. There are no formal entry requirements, although it is recommended that candidates have a minimum of four GCSEs, and employ-

ers may set extra requirements. Legal apprentices are usually offered starting salaries of £12,000 to £15,000 a year, rising to £18,000 in the City.

Vicky Purtill, director of education at CILEX, said: "The new apprenticeships will provide a pathway that is good for social mobility and will greatly widen diversity. It offers an alternative which can be funded—a good way in for those from less advantaged backgrounds."

Vocational law schools such as the University of Law and BPP have already dipped their toes into the apprenticeship waters, offering apprenticeships in partnership with law firms.

The University of Law announced its articled apprenticeship in 2014, giving school-leavers the chance to become fully qualified lawyers in six years. Mayer Brown was the first City office to partner with the university, and four more firms have since joined the scheme.

The University of Law also plans to offer the solicitor apprenticeship under the government scheme from September. Apprentices on its existing and new schemes will also be granted an LLB degree after completing their fourth year.

MICHAEL LECKIE FOR THE TIMES



### CASE STUDY

## Following the letter of the law

**E**mma Stokes, left, loved hearing about the cases her sister was studying for A-level law. She decided to follow suit. When Emma, now 20, left sixth form college in Southampton, she wanted to explore options besides university.

In 2014 she began a BBC apprenticeship, leading to a level 3 Chartered Institute of Legal Executives (CILEX) qualification. Her first "seat" was in rights, legal and business affairs for BBC Drama and the second was with BBC Worldwide. Her final seat is employment law.

Once her contract ends, she aims to study for three years to become a lawyer. "[The work] is so involving. You get a real feel for business that you would never get at university."

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# Calibrated response to skills shortage

The mechanical industries are rethinking on-the-job training to meet the growing demand

## JAMES HURLEY

Engineering giants are creating record numbers of higher and degree-level apprenticeships in the UK as they look to tackle chronic skills shortages. Employers such as BAE Systems, Jaguar Land Rover, and Toyota are responding to difficulties in finding new engineers among graduates or from traditional workshop-style apprenticeships.

BAE Systems is hiring a record 142 degree-level and higher apprentices this year, out of its apprenticeship intake of 680. Its post-A level roles include aerospace engineering and software development.

Some of the recruits, most of whom will be 18, will work in the company's Barrow-in-Furness shipyard in Cumbria, replacing Britain's Trident nuclear submarines.

Richard Hamer, education and skills director at BAE Systems, said higher apprenticeships were created to meet skills shortages, but the business is now seeing additional benefits.

"A higher or degree apprenticeship gives the business a more rounded person than one might get from a graduate at age 21," he says. "You've already got a full blend of academic knowledge with real work competence, plus all the behavioural aspects you get from an apprenticeship. A person is more employable, more quickly."

The business has even reduced its graduate intake to reflect the emphasis on advanced apprenticeships, Hamer says. Retention is also better among apprentices than graduates, and BAE sees the roles as a way to diversify a male-dominated profession.

"Because [advanced apprenticeships] are more flexible and more attractive financially, it can be more appealing than a traditional degree. Those young women who make a choice, against the



At BAE, 18 per cent of the advanced apprenticeship intake is female, compared with 5 per cent of all UK apprenticeships

grain, to do engineering go into it with more thought — they are intelligent about reviewing their options."

At BAE, 18 per cent of the advanced apprenticeship intake is female, compared with about 5 per cent of all UK apprenticeships.

Jo Lopes, head of technical excellence at Jaguar Land Rover, agrees that there has been a "rebalancing" in the engineering sector towards higher skills training. "There's been significant growth in the degree apprenticeships and they are filling roles that previously we would have filled from other routes," he says.

According to the Royal Academy of Engineering, the UK needs more than a million new engineers and technicians. Lopes says that apprenticeships are being created to tackle an "acute shortage" of engineering candidates post-A level. "We needed to have a level of experience that was just not out there. We've got to a point where the apprenticeship route is starting to deliver that type of individual," he says.

Jaguar Land Rover, the largest UK employer of apprentices in the car industry, has 750 advanced apprentices across its business. It has already received 7,000 applications for its 175 higher and degree apprenticeships, delivered with the University of Warwick, to start in September.

While the engineering sector is among the most mature industries in its approach to training, it accounts for a surprisingly small number of apprenticeships. In 2013-14, only 16,000 of the 440,000 apprenticeship starts were in engineering. Larger employers are attempting to address this by encouraging companies in their supply chain to follow their lead.

Toyota has developed an advanced apprenticeship that teaches recruits everything from machining to robotics. For the first three years of the programme, apprentices are employed by companies in Toyota's supply chain.

## INTERVIEW

# Encourage girls to become engineers

## JAMES HURLEY

Teachers looking for examples of engineering in action to inspire talented young people into apprenticeships need look no further than the British astronaut Tim Peake's mission to the International Space Station, according to Dame Sue Ion.

"Just look at the huge engineering challenge involved in getting him up there," says Dame Sue, a former government adviser. "It is still too difficult to get the concept of engineering across in schools. The impression is, 'it's the guy who mends the washing machine', rather than something more sophisticated."

Dame Sue, one of Europe's leading nuclear engineers, has long campaigned to encourage more women to consider engineering as a career. Only 6 per cent of the

engineering workforce is female, and women accounted for only 4.3 per cent of the 1,140 completed engineering and manufacturing apprenticeships in 2010-11. Research has found that only 1 per cent of parents of girls were likely to encourage their daughters into careers such as engineering, compared with 11 per cent of parents with boys.

A lack of understanding of engineering among teachers is one of the reasons far too few school-leavers, women in particular, pick advanced apprenticeships over traditional university education, Dame Sue says.

"Teachers are used to mainstream science, not engineering, which leads a lot of girls to go into areas like medicine and pharmacy rather than engineering. It would help if teachers reflected on the engineering that has to be done to deliver science in the real world." Dame Sue warns that the UK is facing a "bow wave of

## CASE STUDY

### Schools don't tell us enough

**R**obyn Clarke's indecision about her future during her school years will be familiar to many. A gifted student, Robyn felt she was "expected to go to university", but she wasn't sure about taking out a hefty loan and studying a purely academic subject. "I preferred

the hands-on learning style," she says.

Instead of a degree, 23-year-old Robyn completed a level-4 apprenticeship in maintenance engineering at Toyota. The three-year apprenticeship combined electrical and mechanical engineering, equipping her with skills the modern car industry demands. She is now multi-skilled in everything from welding to electrical engineering.

It took a tip-off from a friend for her to find out about the apprenticeship. Robyn

says schools do too little to promote apprenticeships to bright teenagers who aren't sure about university.

"I was taken out of lessons to learn how to apply to university. You never heard any mention of apprenticeships. They advertise university as [the only] option."

She has no regrets about opting for a higher-level apprenticeship. "My friends who went to university are quite envious about what I've achieved. Some of them are struggling to find work."

problems" over the next few years related to a shortage of engineering skills. "One issue is the failure to get enough people in the pipeline [as apprentices], the other is that a lot of the skilled people who entered the profession in the postwar era are retiring." She believes the industry

should work on employing more women and ethnic minorities not simply because it's the right thing to do, but because it is an essential move to fill these gaps: "You are ruling out more than half the population by not encouraging women and minorities." An improvement in



Sue Ion, one of Europe's top nuclear engineers, with a laser scanner

diversity in chemical engineering in recent years shows that industry initiatives can work if enough thought and determination is put into them, she says.

A self-confessed "radical" when it comes to education reforms, Dame Sue says schools could be strong-armed into improving their teaching of science subjects, especially physics, through changes to how their performance is recorded by inspectors. If this were achieved, the industry would have more qualified people to turn to when advertising apprenticeship placements.

"How can a school be rated outstanding if it sends no pupils to A-level physics? You want to create a love for the subject at a very early stage that makes people want to do it."

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OFF THE BEATEN TRACK

# Craft schemes allow artists to shine

## Apprenticeships are no longer confined to heavy industry, says Nicola Woolcock

Mention apprenticeships and, for many, plumbing or welding comes to mind — something involving manual force rather than fine artistry. Now a range of specialist and artistic opportunities has emerged, with the creation of varied apprenticeship frameworks across a number of niche fields.

The frameworks system brings apprenticeships together under headings such as creative skillset, and creative and cultural skills, as well as more traditional motor industry and building services categories, among others. Frameworks will be phased out, however, and replaced with standards designed by employers, with much of this taking place by the academic year 2017-18.

It means those with artistic talents can search for opportunities nationwide, for example advanced jewellery manufacturing and silversmithing is one higher-level apprenticeship (level

4) available under the creative and cultural skills framework. Industries that historically would have sought young local people to train with a master, can now advertise to a national audience.

The framework also formalises the process, awarding a recognised apprenticeship at the end, and weaves in modern requirements such as digital and business skills. Training and skills development programmes have been designed for each craft by industry experts, to identify gaps in specialist areas.

Apprenticeships funded by the government for the crafts and cultural skills sector reflect the contribution these make to the British economy. They are also seen as a way of introducing younger people into highly specialist and skilled industries: in the jewellery sector, for instance, 65 per cent of the workforce is aged from 45 to 65 years old.

Apprenticeships are also available in ceramics, fashion and textiles, sound recording, photo imaging, and for craft and technical roles in film and TV, such as making models and moulds.

“We used to struggle a few years back because no one knew enough about apprenticeships — people thought they were just for plumbers and electricians — that sort of thing,” said Tom Vidler, commercial director at Digital Skills

**FACT FILE**

### We were apprentices too...

**Stella McCartney**, right, is one of Britain's most well-known entrepreneurs who started out as an apprentice. She worked at Edward Sexton, a bespoke outfitter in Knightsbridge, where she learnt cutting, tailoring and selecting fabrics while studying at Central St Martins. The owner helped her develop her graduate show, where clothes



were modelled by Naomi Campbell, Kate Moss and Yasmin Le Bon.

**Alexander McQueen**, another leading fashion designer, who died in 2010, joined the Savile Row tailor Anderson & Sheppard as an apprentice at 16.

**Alan Titchmarsh** left school at 15 to work as an apprentice gardener for Ilkley council in west Yorkshire.

**Jamie Oliver** was an apprentice chef in his teens and set up his chain Fifteen, where apprentices can train with professional chefs and mentors.

Solutions, a subsidiary of Newham College, east London.

“People are starting to understand you can go into specialist industries such as IT as an alternative to university. I'd like to see them expand

more. We have sent people to work in less traditional places such as football clubs.”

Fashion and textiles are industries that increasingly rely on apprenticeships. Recruits are given a working

knowledge of fibres, yarns, fabrics and finishes, but also learn about making materials antimicrobial, breathable, fire and heat resistant, stain resistant and biodegradable.

Traditionally, those wanting to learn niche skills would have needed to apply to an organisation like Qest for funding. The crafts charity offers scholarships of up to £18,000 for people to train with masters in their field, learning craftwork such as clog making, saddlery and cordwain. However applicants have to come up with the idea, find an expert to mentor them, and apply for the funding.

Sarah Jarman, from Co Durham, undertook a year-long apprenticeship to become a traditional signwriter with Qest funding. Now she is setting up business on her own, creating honours boards and signs for canal boats and businesses across the north of England.

“It gave me the chance to train with a master craftsman who had been doing his job for 30 plus years so it was a very special opportunity,” she says. “He relished the chance to pass on his skills and it's been really invaluable for me.”

While this provides help and financial support for those with a specific passion, the national frameworks give a broader scope for would-be apprentices to explore what is available.



## Mervyn King

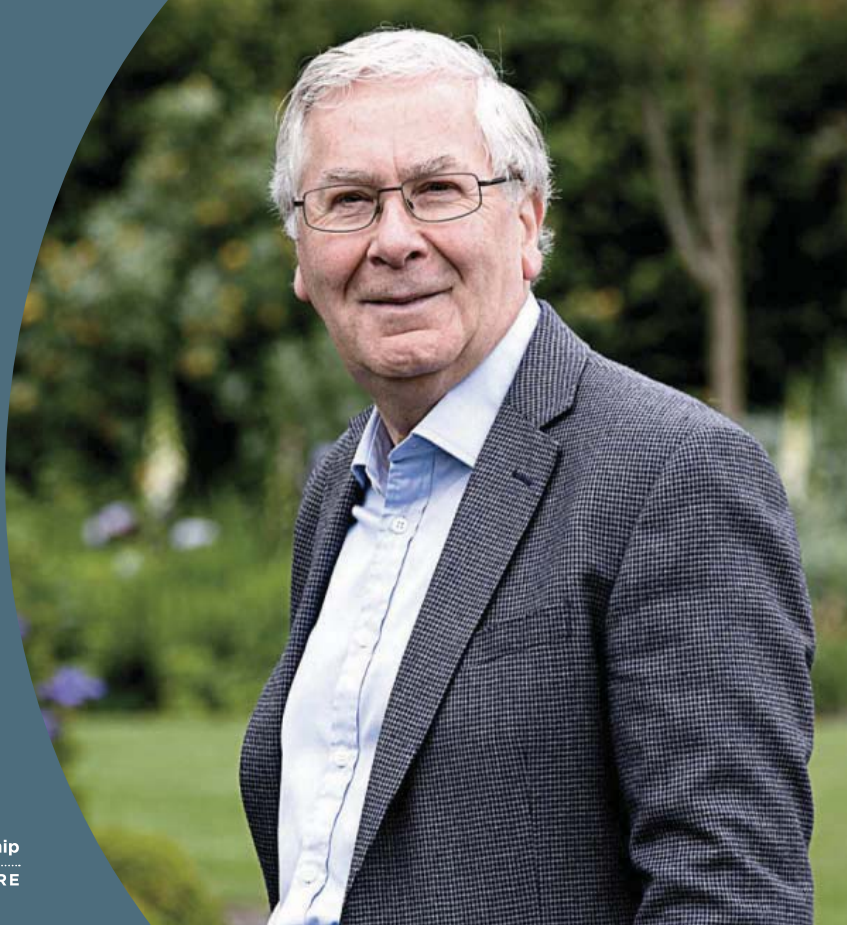
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TOM PILSTON FOR THE TIMES

Has apprenticeship, will travel: Elijah Wood, from Orpington, has been to Monaco, Gran Canaria, Malta and Marseilles fitting out yachts with hi-tech gadgets

## OPINION

## Training to be a chef is spot-on for my son

ROBERT CRAMPTON

Goodness knows (nobody gives you a manual) you make all sorts of mistakes as a parent. I certainly have. My children — Sam coming up 19, Rachel coming up 17 — seem to be doing OK, touch wood. But still, looking after their interests, advising them on their choices, steering them as best you can, can be a tricky, chaotic, damnably chancy business.

That said, as regards Sam, I'm confident thus far that there is one decision my wife and I have got spot-on.

Three years ago, approaching his GCSEs, Sam told us he didn't much relish being at school, didn't want to stay on for A levels, most definitely didn't want to go to university; basically wanted to be done and dusted with the whole classroom schtick as soon as possible. Tomorrow, ideally. What he wanted to do instead, he said, was train to be a chef. Was that OK with us?

His mum and dad — somewhat to our surprise, but knowing our boy's strengths and weaknesses as we did — found ourselves saying fair enough, son. Not tomorrow, perhaps, but if you're sure, then come the summer, crack on. A few months later, exams duly concluded, Sam parted company with the education system.

The conventional academic education system, that is. He enrolled at catering college, where he remains, halfway through his third year of four. While Sam is not engaged on a formal apprenticeship, neither is he following what has become the accepted (and absurdly limited, in my view) route of non-vocational book-based schooling. He attends college but most of the time he has been and is, essentially, working (sometimes paid, sometimes not) and learning on the job, now — having decided on his specialism — as a trainee baker and pastry chef.

Good on him. Good experience in the bank, good cold cash in his pocket at the end of the week. The world will always need bread and cakes. He gets out of bed at 5am, no fuss at all. Previously, cajoling the poor kid up for school (three hours later) had become a major problem. No surprise, really. He's doing what he always wanted to do.

Almost everyone — friends, family — has been enormously positive about Sam's chosen path. That is despite the fact that almost everyone we know — my wife and I included — owe their own upward mobility, such as it is, to extended stints in conventional academic education. People are not daft, however. They see Sam prospering in the kitchen. They know, as do we, he has made the correct choice for him. If not, it must be said, for the restriction of his father's waistline.

## CASE STUDY

### The perfect preparation for a career in food

When Crystal Old was at school she had no idea she would end up working at one of the world's best-known restaurants. She had a shaky start and an unhappy experience in her first work placement, but found another job with a supportive employer and completed an apprenticeship in advanced professional cookery.

With this under her belt, Crystal, below, secured a position at Le Manoir Aux Quat'Saisons, the two Michelin-star restaurant and hotel run by Raymond Blanc.

Crystal, now 19, was in the pastry department, in charge of ice creams and sorbets.

"I was in charge of a massive ice cream machine worth £17,000. Walking down the pathway every day, I'd look at the building and be amazed I was working there," she



Crystal Old made pastries in Raymond Blanc's restaurant

says. "To go from losing my confidence to working in one of the most prestigious hotels and restaurants was incredible. "I learnt a lot, particularly about organisation and how to do certain things by a certain time, for example timekeeping and doing stocktakes, just getting the job done. It was nice to have that trust and responsibility. Meeting Raymond was incredible; he was lovely."

Personal circumstances, and the distance from her home in Dorset, meant that Crystal eventually left the restaurant and went to work for the employer who had encouraged her to take a level-3 apprenticeship. He owns a restaurant with rooms and has just opened a patisserie and wine bar in Dorchester.

Crystal helps to run it and makes patisserie items and savoury dishes.

"I cover all aspects of service and that gives me a buzz," she says. "I'm using all the organisational skills I learnt at Le Manoir, plus making cheesecake, charlottes, cheese soufflés, croque monsieurs."

Crystal took her apprenticeship through the company HIT Training, and won its apprentice of the year prize for Dorset, before going on to win the same award for the South region.

"I'd lost all my confidence at the start so this built it up again," she says. "My dream in the future is to have a place like the one I'm working at now, but my own. I'm picking up so many little things."

## CASE STUDY

### I get to travel the world while training

Most people don't associate apprenticeships with the lives of the super-rich jaunting around the world on luxury yachts. For Elijah Wood, however, this has become a reality. The teenager from Orpington, Greater London, travels the world helping to fit multimillion-pound vessels with state-of-the-art technology.

Elijah, 19, was halfway through his A levels when he decided that he would be better off taking an apprenticeship.

He enrolled in a level-3 apprenticeship with Marine Entertainment Systems Ltd, a company that installs and maintains electronic entertainment systems on yachts. These include bespoke cinemas, streamed music and satellite television, customised products and karaoke, DJ and party systems.

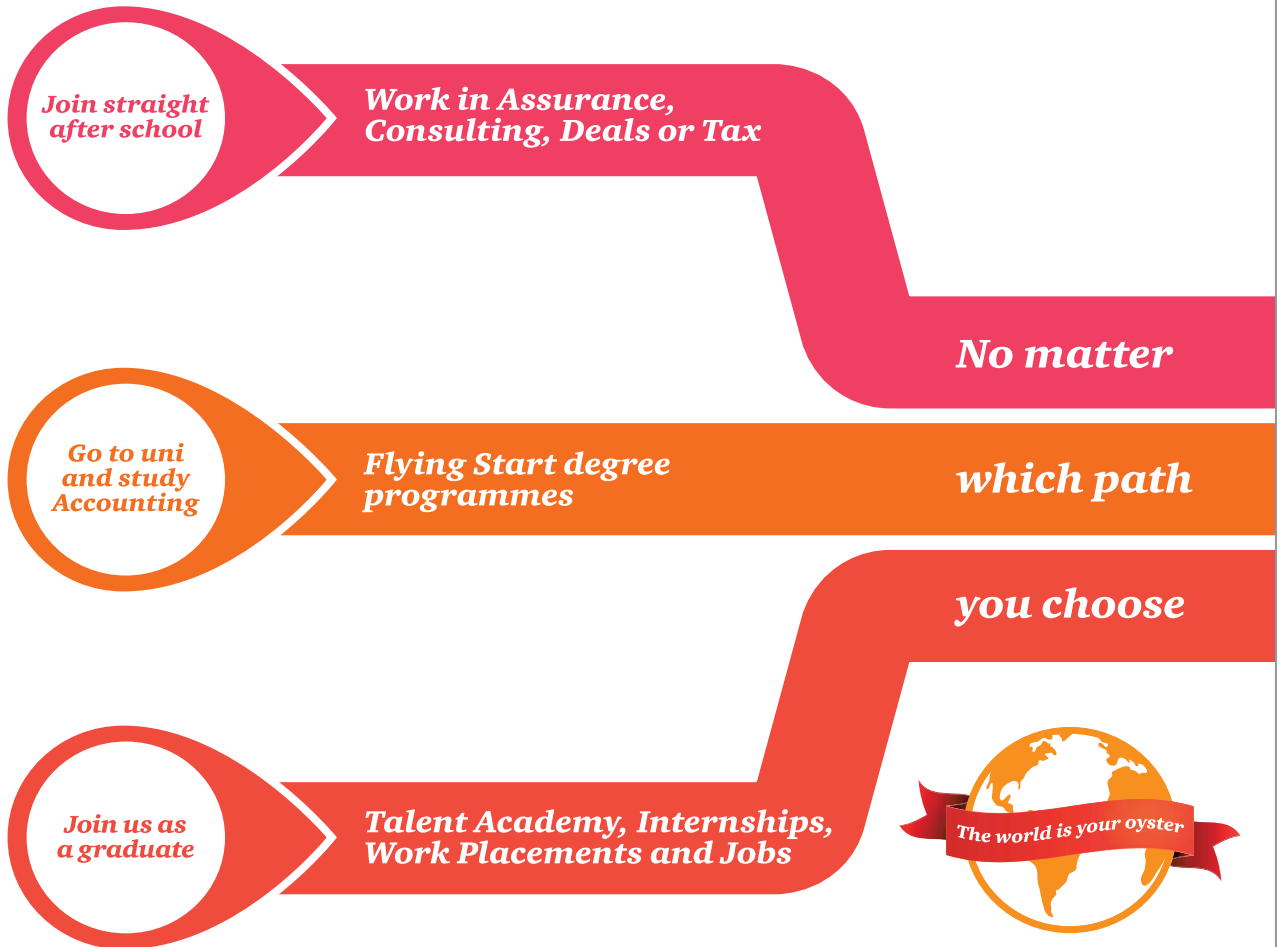
So far his work has taken him to Monaco, Gran Canaria, Malta and Marseilles. Now his training is drawing to a close, he intends to start a level-4 apprenticeship with the same company.

Elijah says: "I did enjoy school and I had considered university, because everyone else was doing it, but it seemed more natural to be working. "When I started I was being shown very basic stuff. In the first week I went to a yacht in Portsmouth to help install a mail server. It was all new to me. I was just standing there helping to screw it in."

"I didn't like answering the phone when I started work, I was quite shy, and I didn't like speaking to customers because I didn't feel professional enough."

Now Elijah speaks regularly to clients, including engineers and captains on yachts who may be experiencing problems. "It's got to be quite specialist on a yacht, using satellite and ethernet connections," he adds. "We install big TVs, stereos and cinema systems."

Case studies by Nicola Woolcock



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