

Volume 55 Number 3 Autumn 2018

Conference & common room

The magazine for
independent schools



**Calling
the tune**





UNIFORM & SERVICE THAT STANDS OUT

Experts in creating distinctive designs using quality fabrics for the UK's leading schools. Tailored sales channels for a first class customer service experience.

STEVENSONS

EST. 1925

SCHOOL UNIFORM OUTFITTERS

WWW.STEVENSONS.CO.UK



Contents

Editorial	5
Look what you're doing	
Better never stops, <i>David King</i>	7
Tackling the 'Brittle Bright' problem, <i>Will Ord</i>	9
Hats off for CAP successes, <i>Sarah Gowans</i>	11
After GDPR – what happens next?, <i>Steve Forbes</i>	14
GSA Heads look forward to the coming academic year	17
What makes our girls so good at maths?, <i>Donna Harris</i>	19
Leavers' Day, <i>OR Houseman</i>	23
Look out	
Against the odds, <i>Caitlin Lambert</i>	25
Look ahead	
Bridging the IT skills gap, <i>Graham Smith</i>	27
Rethinking education for the age of automation, <i>Rohit Talwar</i>	29
No more jobs for life, <i>Marina Gardiner Legge</i>	31
The route into medicine, <i>Janice Liverseidge</i>	33
Life after school: looking beyond university, <i>Claire Granados</i>	35
Why TEF is good for students, <i>Myles Smith and Laura Hughes</i>	37
Career streams from STEAM Fair	39
Look around	
Parental choice, <i>Hugh Wright</i>	41
UKiset gets schools and international students off to a flying start, <i>Alastair Montgomery</i>	43
Casting the net for future stars, <i>Caroline Ritchie-Morgan</i>	44
GSA Girls Go Gold Conferences, September 2018	46
Innovation and inspiration for Strathallan pipers, <i>Heather Dewar</i>	48
Look it up	
Learning how to distinguish fake from fact, <i>Karthik Krishnan</i>	50
<i>Fayke News</i> by Derek J Taylor, reviewed by <i>Neil Boulton</i>	52
Hide fox, and all after, <i>Joe Winter</i>	53
<i>Hereford Cathedral School: A History over 800 Years</i> , by Howard Tomlinson, reviewed by <i>David Warnes</i>	55
Underdogs, curses and 'Neymaresque' histrionics, <i>The Cambridge University Press</i>	57
Letter from America	
Summer sets up September start, <i>Jason Morrow</i>	61
Cover image – Strathallan School, see page 48	

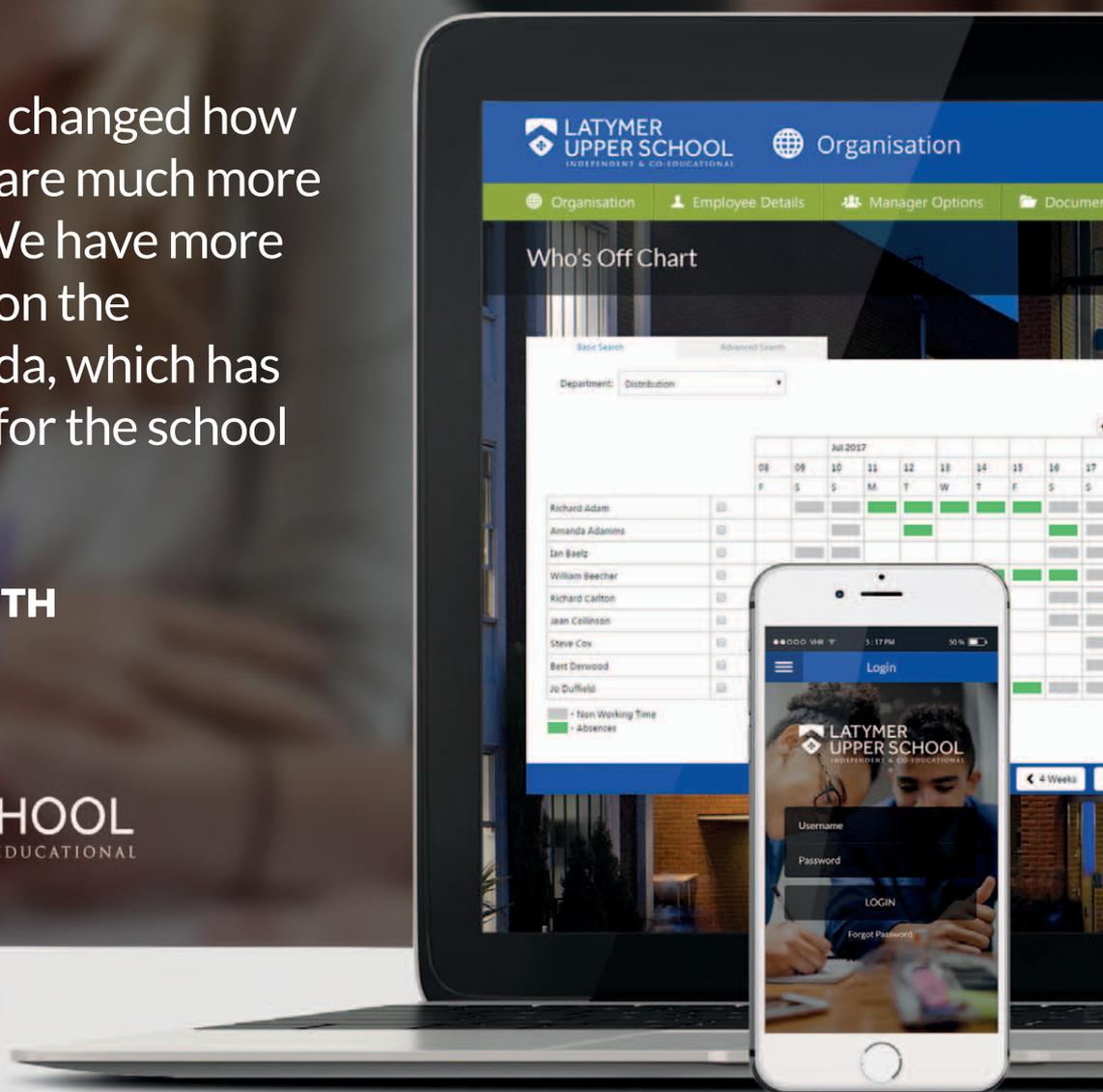


CIPHR

ALL ABOUT PEOPLE

“ CIPHR has changed how we do HR: we are much more streamlined. We have more time to spend on the strategic agenda, which has huge benefits for the school as a whole ”

TRICIA HOWARTH
HR DIRECTOR



CIPHR'S HR SYSTEM ENABLES SCHOOLS, COLLEGES AND UNIVERSITIES TO:

store staff details – manage work patterns and multiple roles – track absence – create your SCR and workforce census instantly – record training activity – improve safeguarding – integrate HR with other business systems

TO ARRANGE A DEMO OF CIPHR, CONTACT US NOW:

01628 814 242 | info@ciphr.com



Microsoft Partner
Gold Application Development



Editor

Tom Wheare

Managing Editor

Jonathan Barnes

Production Editor

Scott James

Advertising Manager

Gerry Cookson

Email: gcookson@johncatt.com

Conference & Common Room

is published three times a year, in January, May and September.

ISSN 0265 4458

Subscriptions:

£25 for a two-year subscription, post paid; discounts for bulk orders available.

Advertising and Subscription enquiries to the publishers:

John Catt Educational Ltd,
15 Riduna Park,
Melton, Woodbridge,
Suffolk IP12 1QT.

Tel: (01394) 389850.

Fax: (01394) 386893.

Email: enquiries@johncatt.com

Managing Director

Alex Sharratt

Editorial Director

Jonathan Barnes

Editorial address:

Tom Wheare,

63 Chapel Lane, Zeals,
Warminster,

Wilts BA12 6NP

Email: tom.wheare@gmail.com

Opinions expressed in Conference & Common Room are not necessarily those of the publishers; likewise advertisements and editorial are printed in good faith, and their inclusion does not imply endorsement by the publishers.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted by any means electronic, mechanical, photocopying, recorded or otherwise, without the prior permission of the Editor and/or the publishers.

Printed in England by
Micropress Printers,
Suffolk, IP18 6DH

The FIFA World Cup held this summer in Russia was a great success. Matches were competitive and entertaining, former winners and pre-tournament favourites such as Spain and Germany were knocked out in the group stages – and England wasn't. Underdogs had their day when South Korea matched the North Korean victory over Italy in 1966 by beating Germany. Analysis undertaken by the Cambridge University Press Language Research team (p55) identified the words most popularly associated with all the World Cup teams. Spain 'failed', Germany were 'stunned' and South Korea were 'plucky'. Belgium, former holders of that epithet, albeit in a different context, were 'star-studded' but didn't win, and France, who did, were 'lucky'.

The other big winners were the hosts Russia, for whom the tournament was undoubtedly a triumph, and the television companies who netted 815 million viewers. These will have seen the name of Chinese property company Wanda prominently displayed on the bill boards around the grounds, demonstrating that the vast Chinese market has now focused on the world game.

Television money has transformed football, especially in England, and the sums now involved are mind-blowing. Key to all of this is advertising revenue, a significant amount of which comes from betting companies.

Thanks to smartphones, the urge to gamble can be gratified instantaneously and the betting companies are making sure that their business is prominently on show, as an article in *The Guardian* of 16th July demonstrated. Their analysis of more than 1,300 adverts shown during the first thirty World Cup games on ITV revealed that one in eight were for betting. Of the eight and a half hours of advertising shown during ITV's coverage of England's progress through the World Cup, the 172 betting advertising slots amounted to nearly ninety minutes or a whole football match, one and a half times as much as the advertising for alcohol firms and four times the amount for fast food outlets.

In the UK gambling adverts can only be shown before the 9.00 pm watershed as part of the coverage of a live sporting event. In Australia, a country which is often described as sport mad, the opposite is true, and gambling adverts in the course of live sporting coverage are completely banned.

Nine out of twenty premier league clubs and seventeen out of twenty four Championship clubs now have the names or logos of gambling companies prominently displayed on their shirts, whilst popular sports broadcasters feature in betting advertisements, including those which display the fig-leaf 'when the fun stops, stop'.

Football has been closely associated with gambling since the introduction of football pools by John Moores in 1923. Ten million people played the pools in 1994 but by 2007 the number had fallen to 700,000 as other forms of gambling and, in particular, the government sponsored National Lottery, became more popular. The pools were exempt from gambling tax because, it was claimed, they were games of skill not games of chance, a notion to which many gamblers subscribed. Whilst studying form is a feature of sports gambling, from horse racing to football, the fact remains that 'the house' always comes out on top in the long run. The Lottery, however, is exactly what it says, a matter of chance.

It is not so long ago that tobacco advertising dominated sporting events and it was, presumably, not far from the minds of the tobacco companies that sport was a good way of getting into the minds of the young. Nobody in education will be unaware of the attraction smoking has for teenagers, nor of the fact that nearly all habitual adult smokers began when they were under eighteen. Nevertheless, the sustained campaign against smoking in public places that closely followed the ban on tobacco advertising in sport, has had a noticeable effect, and the prevalence of smoking among children has reduced steadily since the 1990s.

The gambling industry has to some extent replaced the tobacco companies in using sport as a means to promote their product, a product that shares some of the same addictive potential. Like the Portman Group, funded by companies involved in drinks production to promote best practice in the area of alcoholic drinks, GambleAware (p25) depends upon voluntary donations from what might be called the 'parent' industry in its

mission to limit the harm gambling can cause. The number of children classed as ‘problem gamblers’ is startling, but perhaps more concerning is the prevalence of occasional gambling amongst pupils, rather like those who, at first, smoke the occasional cigarette. Football clubs change their kit each year to make a profit from the lucrative replica kit market, and having the names of the betting companies on those shirts not only means that they are literally woven into something that embodies a powerful loyalty, but also makes them seem domestic, almost part of the family. As with so many of the problems facing society, education is the key and, yet again, if progress is to be made, it will be the responsibility of schools and teachers.

Fortunately, school communities rise to challenges, as you may read within. Six GSA Heads, including the President and President elect, look to the future with inspiring enthusiasm (p17), and their pupils revel in the academic and sporting opportunities on offer. This is not fake news but genuine ground for hope and even confidence in their ability to manage our future. Much is written about the impact Artificial Intelligence will have on the work place and on society in general. Although the future may be hard to predict, situated as it is in the cloud, schools seek to provide their pupils with open routes to further and higher education and the best possible preparation for fulfilling jobs. But beyond this, and much more importantly, schools are dedicated to developing social awareness and the ability to manage risk, and they celebrate flexibility and optimism, so that this generation may, like the England football team, be ‘confident’ and ‘fresh’.

A word from the publisher

We hope you enjoy reading Conference & Common Room Magazine. We supply the magazine free of charge to your school thanks to the support of our advertisers.

It would be really helpful if you can give us some positive feedback on the magazine, so we can support our view that print still has a valuable role to play, in a world that is increasingly digital! Write or email us at the contact details on page 5.

SUBSCRIPTION ORDER FORM

Conference & Common Room is published three times a year – January, May and September. Single copies cost £4.17.

Two-year subscriptions covering six issues cost £25.00. Special terms are given for bulk orders, as below.

Please fill in the number of subscriptions required and the total amount payable.

	<i>Total amount</i>	<i>No. of Subscriptions required</i>
1-4	two-year subscriptions @ £25.00 each	£
5-9	two-year subscriptions @ £22.20 each	£
10-19	two-year subscriptions @ £20.28 each	£
20 or more	two-year subscriptions @ £18.48 each	£

Cheques should be made payable to **John Catt Educational Limited** and sent to the address below.

Cheque for £ enclosed Signed Date

Name School name

(Block Capitals please)

Address

..... Postcode

Alternatively, we can invoice the school for your order. If this is more convenient, please indicate with your signature here

.....

**PLEASE RETURN THIS FORM WHEN COMPLETED, WITH YOUR CHEQUE, TO:
John Catt Educational, 15 Riduna Park, Melton, Woodbridge, Suffolk, IP12 1QT**



Better never stops

David King describes the thinking behind a programme of fundamental change

There is an old saying, 'If you do what you've always done, you will get what you've always got'. This was very much the case at Appleford when I became Headmaster in 2011. Certainly, it was a lovely school and place to work and learn, almost 'Enid Blyton-esque', but, with 58 pupils and a steadily declining roll, hardly a sustainable model for success. So, what to do...?

First question. Is there a market for our school? Too often this question is avoided and schools are inclined to believe that they will succeed simply because they exist. Unfortunately, this is not the case. In a competitive market, one needs a USP that will differentiate your school from the field. In our case this was easy. We were a school that specialised in educating dyslexic pupils. So why were we in such a pickle when there was clearly a demand for our product?

This led on to the second question. Are we as good at what we do as we think we are? Here a bit of honest soul searching

was called for, together with an analysis of similar provision across the country. In our case the answer was an emphatic no. Other 'standard' schools had caught us up and even surpassed what we believed to be a truly specialist provision. In short, it was possible to receive as good a level of provision in the primary school over the road – but we didn't know it.

Our survival therefore depended on providing a setting that reflected the needs of our pupils *and* parents, combined with a dramatic improvement in provision which reflected the 21st Century and put us at the forefront of specialist innovation. Not, as you will note, simply spending more money on marketing.

In accepting this reality, Appleford was destined to embark on a programme of fundamental change and everyone had to be ready and committed to this. In setting our vision and commensurate development plan, it was not only important





that the staff as a whole bought into the plan, but that I, as the Headmaster, had a leadership team and system of governance that were actually going to make the changes happen. More change required, hard but absolutely necessary.

Our plan was, on paper, simple: expand the school from a sleepy little prep school to a prep, senior and sixth form school *and* increase the school roll from 58 to 150 within 5 years. In reality it involved convincing a group of Y8 'leaving' parents to buy into our plans for expansion; and, thereafter, ensuring we had a curriculum and provision that could deliver on outcomes for the next year. At this point, it is worth noting that our plans extended no further than that, bearing in mind that the decision to expand was made in February and our first Y9 cohort needed to be ready to go in September.

In a way, however, this was no bad thing. Having the flexibility to engage in constant review and development on an almost month by month basis enabled us to shape our developing provision in the light of experience rather than aspiration.

As year one progressed, we were able to consider the next year and adapt, change and refine provision as we moved along. The one main lesson learned here was that 'no plan stands up in the face of the enemy'. Being flexible and open to change was the required status quo, together with the engagement of a staff body willing to give everything to the cause.

2016 marked a watershed year with our original Y9 'guinea pigs' sitting their first GCSEs and a senior school filling up nicely from the rear. Over the previous five years we had been engaged in a constant cycle of development, including curriculum, policy, staffing and infrastructure. Three new boarding houses and four new classroom blocks meant cranes and contractors were an ever-present feature.

The mountain had been climbed, the view for 150 pupils was fantastic, but there was no time to stop and admire it. Sitting back in proud reflection would have been a cardinal sin. It was this very complacency which had led to our original problems – now we had to look for a new mountain. And so, this year sees our first cohort of A Level students off to university and a wholesale review and extension of our timetable focusing on developing extra-curricular activities and the introduction of compulsory daily sport and fitness training for all pupils – childhood obesity will not happen at Appleford!

And so it continues

Key lessons learned

- Never believe your school is invulnerable
- Hold on to the traditions of independent education but don't view them as your life raft.
- Embrace change positively and understand that it is necessary for ongoing success.
- Have an overall aim but don't be frightened to change direction if required.
- Focus on quality not expediency.
- Create an SLT that completely buys into the required changes and has the necessary skill sets to make them happen.
- Be open with your parent body. When something hasn't worked, don't hide behind smoke and mirrors.
- Create an ethos of **'Better Never Stops'** and never accommodate anyone or anything that detracts from this.

David King has been Headmaster of Appleford School since 2011



Tackling the 'Brittle Bright' problem

Will Ord argues that self-esteem should come before constant comparison

After my initial years of working as an education consultant with independent schools all over the world, I became very aware of a widespread – and deeply troubling – problem for teachers, pupils, and parents alike. I even gave it a name: the 'Brittle Bright' problem. I have yet to visit a school where it does not exist. There may be happy exceptions, of course, but does this pupil ring a bell in your context?

The 'Brittle Bright' pupil is my term for those children who can perform very impressively in tests, but do not actually enjoy the process of learning. They're often authority pleasers, perfectionist, riddled with anxiety, and risk averse. To the bewilderment of their teachers and parents, ten A grades and one B grade at GCSE will create inconsolable tears, not cheers of delight. Significant numbers of them suffer from bulimia, self-harm, anorexia, stress and depression.

The Brittle Bright child's core concern is 'how do I match up to others?' both in class and on social media, and their answers are rarely forgiving. Performance, not mastery, is the chief concern. Consequently, their confidence and contentment are in a permanent state of jeopardy. Their emotions, motivations and actions are governed by an unforgiving tyranny of constant comparison and the need for the approval of (selected) others. In short, the Brittle Bright pupil is not a happy bunny. So what are the causes of this problem, and what can schools do to tackle it?

The causes are inevitably complex because they involve the myriad influences of domestic, school, cultural and virtual environments. However, the root issue is relatively simple. Somewhere along the way, the Brittle Bright child has been conditioned to judge their self-worth on performance relative to others, not on personal mastery. A performance orientation interprets failure as a condemnation of 'who I am' and is not in the child's locus of control: mastery orientation embraces failure as a fundamental characteristic of progress and can be rewardingly vanquished. In essence, the Brittle Bright child has acquired a corrupt and damaging concept of what learning actually means.

During the training days and parent evenings that I run, some adults have argued that it's a brutal fact of life that we will, indeed, be judged on our relative performance, so kids need to get used to it. However, there are two arguments against this perception. Firstly, performance is not maximised when it's motivated by fear and aversion to failure. It is diminished, along with the child's wellbeing. Great results should be a benign side-effect of a healthy and happy learner, not the sole and suffocating goal of education. Secondly, relative performance is *never* under our control. We very rarely get to choose the field of competition which we're ranked against. Consequently, judging ourselves on relative outcomes we can't control is not only irrational but a recipe for unhappiness.

If there are myriad causes of the Brittle Bright mentality, then we need a multifaceted approach to solving it. At the very least, teachers, pupils and parents need access to both the understanding and the practical techniques that can convert the Brittle Bright into confident and happy learners. Developing a 'Growth Mindset' school ethos – in the staff room as much as the classroom – is certainly an important part of the story. However, parents need training too. Consider that 25% of a child's waking year is spent at school with an adult to child ratio of, say, 1:25. The other 75% of their waking year is spent with parents at an adult to child ratio of 1:1 or 2:1. Home influences are relatively intense compared to school. As a result, while teachers can work very hard to develop Growth Mindset approaches at school, the child may then go home and receive well-intentioned but 'fixed mindset' messages from their parents. 'Don't worry darling, you're a natural at maths, you'll do fine' sounds great, but it will be completely at odds with a school that uses Growth Mindset feedback. Parents and teachers need to sing from the same hymn sheet for healthier mentalities to develop effectively.

Another key factor in improving the wellbeing of these pupils – all pupils in fact – involves the careful balancing of the 'will to improve them' versus the 'freedom to enjoy being who they are'. Let me quote Teddy, the eleven year old character in JD Salinger's short story of that name, to help clarify:

[My parents]... "don't seem to be able to love us just the way we are. They don't seem able to love us unless they can keep changing us a little bit. They love their reasons for loving us almost as much as they love us, and most of the time more. It's not so good, that way."

Teddy by JD Salinger, 1948

The accusation is laid at the feet of parents here, but perhaps schools can be involved in this issue too. With every good intention, adults want children to grow and progress, and subsequently they're given appropriate feedback on what they do. However, if that is the *only* message that young people seem to receive on their average day – 'good, but now improve' – they can conclude that just being themselves is never going to be acceptable. It's as if we look at a beautiful apple blossom and keep chiding it for not being an apple yet. We need to help children progress, but must balance this aim with the clear message that what they are *now* is perfectly acceptable too. To this end, Mindfulness, properly understood and practised, can be of great benefit.

There can be many other ways of tackling the Brittle Bright problem. Here's a small sample from the ones that I explore on my 'Great Learner' course:

Look what you're doing

1. Explore what 'success' should mean in school and in life. Do this with staff and pupils where possible.
2. Model, encourage and celebrate 'personal bests', and reduce comparative rankings.
3. Consider types of progress, not just levels. For example, do your pupils know that confusion can be a symptom of progress?
4. Have a marking/praise/feedback policy that focuses on 'strategy, effort, and practice'. Reduce the use of grades, particularly target grades.
5. Have an award called 'Learning Warrior of the Week' – a pupil recognised for their courage and risk-taking in the learning process.

These and other strategies work to improve results, but also to enhance the wellbeing of young people. Both are essential if we are in the business of educating for life, not just schooling for grades.

Will Ord is Education Trainer & Director of Thinking Education Ltd and works internationally with teachers and parents. His website is www.thinkingeducation.co.uk

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

St Mary's awarded Green Flag for fifth year

St Mary's School Colchester has just been awarded its fifth Green Flag by Eco-Schools, an international initiative run by Keep Britain Tidy, which aims to encourage young people around the world to value and care for their environment.

St Mary's is one of a handful of Ambassador Eco-Schools in the country and has its own student-led Eco Team which spearheads recycling and sustainability activities within the school, while also sharing its eco experience and expertise with like-minded organisations in the community through conferences and seminars. The school was awarded its first Green flag in 2008 and has been assessed every two years by Eco Schools in order to be re-awarded.

'Achieving the Green Flag for the fifth year in a row is a great achievement and one no other school in the country has managed,' said Mrs Sarah Wilding, St Mary's Eco Co-ordinator. 'Our students are certainly passionate about looking after our environment for future generations and their energy in spreading this message to other students and throughout the wider community is so impressive.'

St Mary's has recently been invited to twin with a school in Australia that has just received its first Green Flag, in order to show students on the other side of the world how school initiatives can make a positive difference to our planet.

Earlier this year, St Mary's Eco Team responded to David Attenborough's shocking revelation of the plastic choking our oceans and pressed the school to implement a ban on all single-use plastic water bottles. A re-fillable water bottle is now included in the list of essential school equipment for every student.

St Mary's works very closely with Colchester Borough Council in promoting Eco Schools and sharing knowledge and experience of eco-friendly school initiatives. The school also has an association with Essex Wildlife Trust to protect and enhance the biodiversity of the school grounds and Essex Wildlife Trust staff regularly lead environmental workshops for students. St Mary's annual 'Eco Week' involves all students in the school in activities designed to encourage environmental awareness.





Hats off for CAP successes

Sarah Gowans celebrates the continuous achievement of Caterers and Cleaners



Napoleon Bonaparte is reported to have said 'An army marches on its stomach'. The same can be said of a school – without proper nutrition, pupils cannot learn effectively and their teachers cannot teach them effectively. At Bishop's Stortford College, with almost 1200 day and boarding pupils aged from 4 to 18 and over 300 members of staff, it is safe to say that their catering team would have kept both Napoleon and his army very happy.

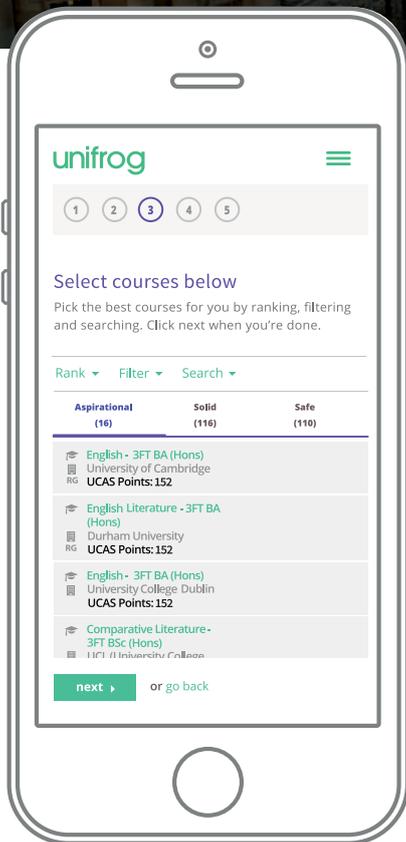
Catering Manager Gary Law and his team of 27 have now won a total of 7 Gold CAP (Continuous Advancement Programme) Awards in successive years. A major national scheme, the CAP Awards recognise excellence in catering and are regarded as the highest measure of quality, safe practice and service. The College is committed to a programme of healthy eating, and Gary's team are the only school team in the country to achieve this. They continue to gain scores well over 90%, a remarkable achievement given that they have to demonstrate improvement year on year.

Founded in 2011, CAP's objective was to help Housekeeping & Cleaning and Catering services to gain the recognition they deserve within the Education and Healthcare sectors. That

objective has been achieved and today the CAP teams help organisations throughout the UK and Ireland to improve standards of quality, hygiene and cleanliness through a positive and dynamic development programme. They recognise that the services provided by Housekeeping & Cleaning and Catering teams are a vital element in cementing a school's reputation for commitment to quality. The CAP Awards programme is designed to signal core business excellence. Covering all site services, the scheme helps to secure a competitive marketing advantage through independent audit and recognition and to demonstrate continuous progression of services.

The CAP Awards development scheme incorporates regulatory standards, and participants in the development programme, currently just shy of 50 schools in the UK, can be confident of regulatory compliance when the inspectors call by simply maintaining levels of performance and following the CAP action plan. CAP inspector Ian Jackson said, 'We were most impressed by what we found during this unannounced visit to Bishop's Stortford College. The Catering Team are to be congratulated on their 'tasting plate' scores for lunch and supper services and, despite being under the additional

The Universal Destinations Platform



UNIFROG IS THE ONE-STOP-SHOP FOR ALL THINGS CAREERS AND DESTINATIONS.

-  Trusted by over 200 UK independent schools
-  Whole-school platform for careers and destinations
-  Full range of post-school pathways including degree apprenticeships and universities overseas
-  Saves staff admin time by ~40%
-  99.5% of Unifrog partner schools rate our customer service as 'very good' or 'fantastic'

Our 1,000+ partner schools around the world include:



To find out more and to see how Unifrog works, contact Daniel at daniel@unifrog.org or on 0203 372 5991

pressure of our rigorous assessments on this day, the interaction between the pupils and the catering team is to be commended. When combined with the catering team's determination and motivation to beat their previous scores, it all bears well for the service.'

But the backbone of a busy school isn't just about the catering and nutrition the pupils and staff benefit from, it's about the very fabric of their environment, the buildings and grounds, and how they are cared for. Bishop's Stortford College enjoys a spacious campus: state of the art architecture sits cheek by jowl with Arts and Crafts buildings dating back to the 1920s and 30s. The original school building, School House, which was built before the establishment of the school in 1868, is about to undergo major refurbishment, transforming it into a new administrative hub and College Reception, with classrooms and the Senior School staff common room. Also on site are three new boarding houses, opened this academic year, all enjoying *en suite* facilities, but, with many other buildings over 100 years old, there are certainly many challenges facing the Housekeeping team here. How often do you walk down a street and it's the litter you notice rather than the shops or the buildings? The College are most fortunate in that they don't have a litter problem and enjoy many beautiful buildings and this allows everyone to focus on the job in hand – learning and teaching.

Japanese 'organising consultant' Marie Kondo says, 'The objective of cleaning is not just to clean, but to feel happiness living within that environment.' Perhaps this is what drove the College to reorganise their cleaning operation almost two years ago. Following in the footsteps of the Catering team,

the College Housekeeping & Cleaning team, a group of 25, in collaboration with staff from partner contractor, Nightingales, have also recently achieved the Gold standard from CAP. Participating in the awards programme for the first time, the College underwent an unannounced assessment in May 2018 scoring 91.4% for cleanliness and compliance. The benchmark level for Gold is 75%. Facilities Manager Tim Hanks and the team will now be working on areas where they must improve in order to demonstrate the continuous advancement needed to achieve gold again next year.

Assistant Bursar Greg Stewart said, 'The whole College community is extremely proud of what our housekeepers and Nightingales have achieved together. Along with the Gold Awards for catering already received, it demonstrates our commitment to the manner in which we look after our pupils and staff and the great pride we take in it. It's a real boost for the work of our support staff to be recognised in this way.'

College Headmaster Jeremy Gladwin said, 'Bishop's Stortford College is a true community and the awards given to our caterers and to our cleaning team have highlighted the work of two of our often unsung heroes. To be recognised by an external agency for excellence is tremendous and comes on the back of an outstanding ISI inspection result the year before. It gives the whole school community a boost when such things happen and I applaud the efforts of our entire support team in helping to make Bishop's Stortford College such a wonderful place to live and work in.'

Sarah Gowans is the Marketing Manager at Bishop's Stortford College





After GDPR – what happens next?

Steve Forbes from RM Education has some follow-up advice for schools

After years of anticipation and months of planning by companies and organisations of all sizes, the new General Data Protection Regulation (GDPR) legislation is now in force. By now, you should be quietly confident that sufficient policies and procedures are in place to protect your school data.

However, GDPR is an ongoing process and, to make sure your school stays compliant, you must stay responsive. Below are some key points on how to stay on top of GDPR policies and what should happen if a data breach occurs in school.

Awareness

Primarily, you need to educate all your staff. A good place to start is for senior management or your Data Protection Officer (DPO) to educate teams on the importance of data protection and how the law translates to each individual department. If your users don't understand the impact of not following processes, or how to use the technology or policies you have implemented for GDPR, then any investment is wasted. As with most training and procedures, a little common sense is required, and data privacy should never jeopardise student safeguarding.

Processes

Ensure that your staff know where your processes are stored. It is also best practice to have an incident response plan. This ensures that if you do have a serious data breach, you have a plan that you can quickly put into action, reducing the amount of time taken to respond. Part of the incident response plan should be to have a prepared statement ready for the school to use if they get questions from parents or the media about the data breach. This removes the need for your staff to think on their feet at what could be a stressful time.

Your DPO is under obligation to maintain a breach register where all breaches, no matter how trivial, are recorded and monitored. Therefore, should the unanticipated occur, it is a good idea to ensure that all staff members know that they should inform your DPO. Under GDPR you have an obligation to report a serious data breach within 72 hours. It is important to be aware of this three day limit since there is a lengthy form to fill out, and the process involved in reporting a breach to the Information Commissioner's Office (ICO) takes time because information needs to be gathered from all the individuals involved.

GDPR doesn't mention specific technologies to help you secure your data – it is technology agnostic because technology changes so fast – but there are tools available to turn all this information into easily understandable and actionable insights. What GDPR does state is that you must have appropriate security based on the type of data and the risk to that data. Remember, when any new technology is introduced, your DPO must review and sign off the Data Privacy Impact Assessment which considers any risks associated with implementing the new technology.

Mitigating data risk in school

Fortunately, in schools we don't often have the threat of a malicious insider trying to steal confidential company information for commercial gain, and most data breaches in education come from human error. Here are some of the key issues and the actions a school can take to guard against a potential data breach risk.

Data sent to the wrong recipient by email

Below are a few steps you can follow to make email communications less prone to accidental breach:

1. **Turn off autofill in your e-mail:** many of the mistakes come from programmes such as Outlook or Gmail automatically filling the address field with the most commonly or last used email addresses. Whilst it can be a handy feature, it is also a risk that turning off autofill will avoid.
2. **Enable BCC by default:** most client emails don't have BCC available by default, so if the user doesn't know how to activate it they may be tempted to put all the email addresses in the CC field. This means that every recipient of that email can see the other recipients. This could be an issue if the subject of the email is sensitive, eg if you were emailing all parents whose children receive pupil premium funding or have attendance issues.
3. **Mail encryption:** this may prevent email messages being intercepted and read whilst in transit to the recipients. This is good practice where you are sending potentially sensitive data via email.
4. **Data labelling:** you can use the advanced functionality in Office 365 and now G Suite to label your documents and emails with a sensitivity label. This prompts the user to think about what they do with those documents or emails. You can also prevent a document from being copied or printed, which stops sensitive data from being left on printers for unauthorised people to find and read. Finally, you can prevent documents or emails with certain labels from leaving your organisation.

Loss/Theft of paperwork or devices

You should challenge the practice of allowing paperwork to leave secure areas within the school when digital forms of data are far easier to secure and are more portable. Devices that leave the school should have more security than devices that stay within the school gates and should only be accessed by those authorised.

Encryption is one of the easiest ways of doing this – encryption technology such as BitLocker on Microsoft devices can ensure that should the device be lost or stolen it would be extremely unlikely that anyone could access the data on the device.

If you allow your users to access school data from their own device, then you may want to consider additional controls, so that data can't be downloaded directly onto the devices. Office 365 and G suite allow users to access the data they need from any device but ensure that the data remains within the cloud ecosystem and never resides locally on the device. Realistically, schools should carefully consider how their users access data from devices that they do not have any control over. Do you want data on devices that may not have the latest security patches or any anti-virus solution, or that outsiders have access to?

Insecure disposal of paperwork or devices

You must ensure that when any confidential paperwork is being disposed of, this is done in a secure way, either by use of a cross shredder or a secure disposal service. Any devices or computer equipment should be disposed of using an approved supplier and you should get certification to demonstrate that the equipment has been disposed of securely.

What should happen if privacy and data security is breached?

- The main issues to consider in a data breach process are:
- Identify who is at risk
- What the risk is
- What data is at risk

You can then make the decision as to whether the breach is likely to result in a 'risk to the rights and freedoms of individuals' and serious enough for your DPO to report to the ICO and the individuals themselves. The key question to ask is what impact

the data breach will have on the individuals and your school. If it is likely to have an adverse effect and impact negatively then it should be reported without undue delay.

There has been a lot of noise in the media about the increase in fines under GDPR and we are likely to see a closer focus on data protection practices in education establishments, given the sensitive information that they are responsible for. We are already starting to see an increase in reported breaches. Just recently, the University of Greenwich was fined £120,000 for a serious data breach whereby the personal data of 19,500 students was placed online. This media interest should prompt schools that have made little change in their data protection practices to realise that the GDPR is to be taken seriously.

New regulations and policies can be difficult for schools to adapt to and comply with, but GDPR was not designed to confuse and alarm schools. It was aimed at bringing businesses into line with the digital era and ensuring that large amounts of data are stored in a more transparent way.

You will probably need to accept that it is going to take time to change your school's entire culture around data, and, indeed, it is an ongoing journey for all organisations. When you have instilled that culture, you will be fully meeting the new regulations, but GDPR, like safeguarding, requires continued training, awareness and communication to maintain compliance.

*Steve Forbes is Security, Compliance and Online Safety Specialist at RM Education
For more information, visit www.rm.com*

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

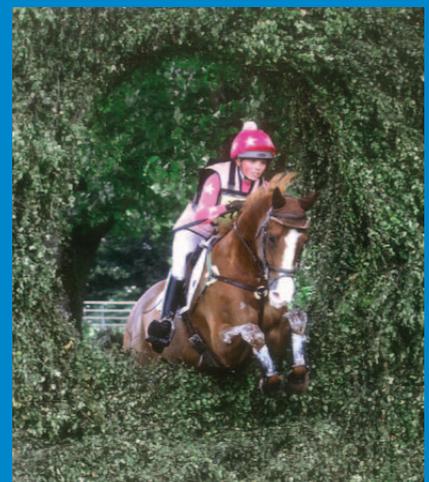
St Swithun's School pupil selected for the Great Britain junior eventing team

Georgia Bartlett, a 17-year-old pupil at St Swithun's School, Winchester, was selected for Great Britain's eventing squad for the Junior European Championships in Fontainebleau in July following her success at the Nunney International event.

A fiercely contested second place finish in the final Junior Trial was enough to secure Georgia's selection into the strong squad of five. This is a particularly noteworthy achievement because Georgia is in the middle of her A level courses – psychology, geography and religious education – and is studying hard at the same time as practising for the event.

Speaking about her selection Georgia said, 'this has been a goal of mine for a very long time, and I am so excited to compete at the European Championships.' With six training sessions a week it has often required very strict time management to ensure that Georgia keeps pace with both her academic studies and her eventing. Highlighting her busy schedule and the importance of balancing her workload, Georgia has said that 'there is an awful lot of travelling to and from events and training sessions, so I do a lot of my homework and studying in the horse lorry on the way!'

Eventing requires riders to demonstrate a range of different skills through the disciplines of dressage, show jumping and cross country. The scores from all three elements are then combined. Prior to the European Championships, Georgia will have additional training sessions in Cirencester and Bury St Edmunds.





Cambridge Assessment
International Education

Education ready.
University ready.
Work ready.
Ready for the world.

Cambridge Pathway inspires students to love learning, helping them discover new abilities and a wider world.

Schools use single or multiple stages to shape their curriculum around how they want students to learn.

Independent schools in the UK tell us that qualifications from Cambridge International offer a distinct choice of content and assessments, and build the knowledge and skills students will need for university, work and beyond.

To learn more, visit [cambridgeinternational.org](https://www.cambridgeinternational.org)

Cambridge
Pathway 

Learn • Discover • Achieve



GSA Heads look forward to the coming academic year



Gwen Byrom, Loughborough High School, GSA President 2018

My hope for our schools and the young women in them in the coming year is that they continue to grow into principled, strong individuals. My abiding wish for all students is that they find the path in life which is right for them, and that they feel able to articulate that and bring it into reality in their lives with us and beyond.

Confucius is credited as saying 'find a job you love and you will never work again': finding that abiding love is an important part of realising who you are. Our schools help our girls to do this, but I hope that we also give them the confidence to know when something isn't right, and the courage to walk away if they need to. The recent suffragette commemorations have shown us how much previous generations have fought for the right, not just for the vote, but to own their own lives – a right which is still too easily given away. Too many girls in the world do what they ought, rather than what they dream, and they need us to help them find strong role models, cheerleaders and a strong network of support and encouragement.



Sue Hincks, Bolton School Girls' Division, GSA President-Elect for 2019

I would like girls' independent schools to be recognised as centres of academic, pastoral and extracurricular excellence which enable girls to thrive and fulfil their potential by promoting positive female role models and encouraging girls to embrace opportunities, regardless of traditional gender

stereotypes. The collaboration of headteachers in GSA enables those of us who care most about girls' education to share and develop good practice as well as to be a mouthpiece for girls' interests in UK education.



Jane Gandee, St Swithun's School

I ducked behind a convenient pillar in Winchester Cathedral to take my shoes off for a moment before our final event of term, the Valedictory Service, and imagined a newspaper headline: footwear is a feminist issue. After all, a formally dressed man does not typically experience toe-crunching discomfort.

My aspirations for girls' schools for

2018-19 are informed by the above. I hope that we will continue to challenge unhelpful stereotypes, from the frivolous, such as that every smart dress requires a high heel, to the serious, such as that all girls need to be taught in the same particular way. I believe that we must avoid the unhelpful boy/girl dichotomy so

beloved of the media and focus on educating a range of female students with different personalities, attitudes and aptitudes. Let's tell the world that we are experts in girls' education not because girls have special needs, but because in girls' schools we neither pigeon-hole nor stereotype. Let's highlight the innovative teaching, the opportunities for character development and the compassionate and courageous young women who emerge from girls' schools. Let's speak up for what we believe to be right: a world in which character always trumps appearance.



Dorothy MacGinty, Kilgraston School

The global phenomenon of the 'Hear Her' movement is a result of recent high-profile alleged sexual misconduct cases. However, for me, the genesis of that campaign goes much deeper. As the Head of a leading independent girls' school, I take equality as a given. What I want, and what I anticipate Kilgraston girls will expect, is more

than equality. Our pupils leave this school with a sense of anything, really anything, being possible. Nothing should stand in the way of their goal: not convention, peers, personal doubt or lack of ambition. As recently as a decade ago, I felt the pressure not to recommend certain tertiary routes to teenage girls. The 'safe' roads for the brightest girls – law, medicine, languages – always attracted the cream of the crop. But what of our future engineers, cutting-edge scientists, revolutionary technologists? The national average for girls leaving school to pursue a university STEM subject is 24% (source: WISE 2016/17). This year, 65% of Kilgraston girls have been offered places to study these subjects at undergraduate level. This result takes investment and commitment. From the age of ten our pupils are taught the Sciences by subject-specific specialists. Aspiration is a mind-set, your personal take on the world. Don't just 'hear her' – listen carefully.



Isabel Tobias, Redmaids' High School

I see a renaissance in education for girls as society seeks new responses to gender discrimination and inequality. For a time, it was unfashionable to suggest that these problems remain, but girls' schools are again at the forefront of challenging stereotypes and enabling girls to develop as individuals. Alumnae tell me that at our all-girls school they

did not think of themselves as female or as limited. They were free to take risks, but in the work place they are treated differently because of their gender. They are also aware that the world of work was not constructed by women and that there is pressure to adopt masculine characteristics in order to fit in. When leading companies were asked to explain why they

Look what you're doing

still have few or no women on their boards, their responses indicated the continuing prevalence of the view that women are 'not like them', or 'not tough enough'. This indicates an unjustifiable presumption about leadership and management style. My school, and others like it, gives girls the freedom and space to develop the resilience, positive self-esteem and interconnectedness that makes them strong as young women and ready to shape the world in their own image.



Dr Millan Sachania, Streatham & Clapham High School GDST

In June I was delighted that my school, Streatham & Clapham High School GDST, participated in the unveiling of a blue plaque in Tooting at the childhood home of Sadie Crawford (1885-1965). Rightly described on the plaque as a Jazz Pioneer, in the first two decades

of the Twentieth Century Ms Crawford intrepidly crossed the globe performing vaudeville and jazz in Europe and the USA, pre-revolutionary Russia, South America, Australia and New Zealand. For years, such women as she have been forgotten, but now talented and pioneering women are increasingly and rightfully receiving the recognition they deserve but have never enjoyed.

Indeed, in my school we have just inaugurated an annual 'Sadie Crawford Music Scholarship' in her honour. Sadie's personality brilliantly represents the characteristics that we should be seeking to develop in all our pupils. A pioneering spirit; the courage to venture beyond the lines of convention; high standards; an appetite for adventure; integrity, authenticity, creativity; and a sense of fun. These are the ensigns of our educational sector. Let us find ways of raising them even higher and flying them even more proudly in the ensuing months.

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

St Swithun's take part in community service week

In the hottest week of the year, twenty-five girls from St Swithun's School volunteered their time to help re-launch UNIT 12, a recently established facility to provide activities for 7-18 year olds and semi-retired and retired residents of Winchester. This marked St Swithun's inaugural community service week for Year 11 girls after their GCSEs and was part of a three-day social action project organised by Community First Volunteer Service, culminating in a barbeque attended by The Mayor of Winchester.

Louise Todino, Director at UNIT 12, said 'I have thoroughly enjoyed working in partnership with Community First and St Swithun's to open our doors to the public to see what we do here. I would like to thank all 25 girls from St Swithun's who helped out with the activities for the launch. They have been absolutely amazing, have shown great initiative and their enthusiasm was infectious; they are a real credit to St Swithun's School. I would also like to thank Community First for their help facilitating this event and Tesco and Homebase for their support.'

Volunteer Phoebe Shannon said 'Over the three days I have really enjoyed the inter-generational dance workshop with pupils and parents from Winnall Primary School and transforming the garden into a more usable space with its own vegetable patch. Having just finished my GCSEs it has been really great to use this time to give something back to the community and I would recommend any young people to volunteer.'

Simon Mayes, Head of Outreach and Partnerships at St Swithun's endorsed the school's strong links with the local community and hopes that the involvement with UNIT 12 will be a long-term commitment.





What makes our girls so good at maths?

Donna Harris knows – it's getting stuck!

In polite conversation, Mathematics is often referred to as a terribly difficult subject discipline; pupils might characterise it as 'well hard'. It can be considered the preserve of the over-logical and the introverted, the home of one generation's Star Trek's Mr Spock and a more recent cohort's Big Bang Theory Sheldon Cooper. There is also a cultural stereotype that 'Boys are better at Maths'. I disagree.

Some pupils, and this would include both boys and girls, simply need our help and encouragement to learn to enjoy the challenge of Mathematics. Some pupils, both girls and boys, need to be taught how to persevere and develop the determined resilience that is so crucial to being a successful Mathematician.

Each year Manchester University runs the Alan Turing Cryptography Competition. The latest competition followed the story of two young cipher sleuths, Mike and Ellie, as they became caught up in a cryptographic adventure, 'The Tale of the Morphogenesis Mystery'. New chapters were released over six weeks, each with a fiendish code to crack. Points were earned by cracking each code and submitting answers. Out of over 1,000 teams, the all-female Stockport Grammar team, Pythag'R'Us, were crowned as winners last year after picking up the most points across the six chapters and the epilogue.

The National Cipher Challenge saw girls and boys from our Fifth Year and Sixth Form – who called themselves Pythag'R'Back – compete against over 3,500 teams at the University of Southampton. They won the top team prize of £1,000 and were presented with their award at Bletchley Park, the once top-secret home of the World War Two codebreakers. Our Head of Mathematics reported that the team were in school until quite late one evening trying to decrypt the final message and that it really felt like a mini Bletchley Park!

We are not a girls' school. We are fully co-educational and there was certainly no deliberate intention to form an all-girl cryptography team. Fewer than 50 teams out of the 1000 managed to complete all six challenges and four of our teams here at SGS were successful in doing just that. This was a great achievement for our winning team who just happened to be girls. So how do we encourage our girls (and our boys) to excel in Mathematics?

Back in 2012, the UKMT (United Kingdom Mathematics Trust) launched the European Girls' Mathematical Olympiad. I was Head of Mathematics at the time, with two daughters of my own, and the introduction of this new competition surprised me. Why did girls need their own competition? There were already a number of Maths competitions available for different age groups, so why separate out girls? The reasons were explained through various channels. Girls were considered less likely to 'have a go' at unfamiliar problems, and less likely to 'make an educated guess'. Girls, it seemed, required a higher level of confidence in their Mathematics before they were willing to commit answers to paper. This gave me something to think about.

At SGS we had not encountered a girl/boy divide in take-up of Mathematics or STEM subjects at GCSE or A Level, or in University subjects, but it was clear that other schools had had a different experience. There were schools where girls' examination results in Maths and Science A Levels were absolutely outstanding, but even so those girls were not choosing to study Mathematics or STEM subjects at University, and they were not often able to enjoy or excel in Maths Competitions. This prompted me to consider what we were doing well and what we could do more of.

The truth is that Mathematics involves fundamental thought processes which are transferable to other areas. Government initiatives encourage us to place Maths in real life contexts wherever possible, but I think they are missing the point, because in its purest sense Mathematics is abstract, and this abstraction is precisely what makes it so uniquely useful.

Successful problem solving often involves abstraction, not to make a problem harder, as some children in Maths classes may feel, but to make the problem easier. The ability to take a problem, simplify it through abstraction, then analyse and solve that abstract problem before relating it back to the original context, is a skill well worth having, and certainly well worth learning and developing. Being explicit about this process in school encourages the mathematical ability of both girls and boys to flourish. Any pupil who is unaccustomed to struggling and wrestling with a problem needs to know that this is how it is supposed to be – struggling is learning.

Getting Teaching and Learning right in Mathematics has to be a key priority for schools. Teaching Mathematics to children is challenging but also immensely satisfying. Each subject on the curriculum poses unique challenges, but Mathematics is different because the real learning in Mathematics takes place when pupils are just the right amount of 'stuck' – sticky but not stranded! Being stuck is absolutely vital to making progress – and pupils do not like being seen to be stuck. This may pose a number of problems for teachers but, crucially, it also provides an important opportunity for us to use Mathematics to develop and encourage independent thought and resilience – two aspects which are under discussion in many schools.

The focus in classrooms should be on the process that children need to go through in order to take a contextual problem and abstract it. Currently too much focus is on the context, when the real issue is 'Can our pupils understand a problem, select and use appropriate abstract methods, then translate their answer back into the original context?' This is Mathematics at its best. As soon as children move beyond counting on fingers and arithmetic they are learning to do this abstraction, but in some children mathematical progress stalls during KS3, which makes GCSE an uphill challenge. Pupils who have not yet understood the beauty of Maths can be heard to say that Maths is something people either can or can't do –

Look what you're doing

The successful Pythag'R'Us team that took part in the National Cipher Challenge



'You either know it or you don't'. Again, I disagree. All the great discussion out there in education on resilience, independence, metacognition and mastery, can be found in and developed through the teaching and learning of Mathematics. When we teach girls and boys to embrace Mathematical struggles, we unlock a wealth of potential.

As a senior leader I visit lots of lessons. Musicians know that some pupils are more talented than others, but that no musician excels without regular practice and without great determination. They also know that everyone improves with practice, however challenging it is or how 'unmusical' a pupil may be. Those who excel in Sport would not expect to progress beyond a certain level without fitness training, targeted coaching and, again, great determination. And we all accept that everyone can improve in Sport with regular practice and instruction.

With STEM subjects and with Mathematics, and particularly with girls, we need to help pupils to change the view that natural talent beats determination. We are careful at SGS to challenge some statements and some assumptions girls make about ability. I recall a few years ago one of our most able girls was adamant that she was not particularly able, she just worked hard. She was totally convinced that if other pupils worked as hard as she did they would perform better than her, and therefore she was not going to be able to succeed at the most competitive universities for Maths. Rubbish! It took some listening and some discussion and she took some convincing over time, but the young lady concerned later graduated with a First from Oxford. She is now absolutely clear that the hard work she had at one time undervalued was ultimately the most important factor in her mathematical development and success. We can significantly help our girls, and boys, as long as we watch out for and challenge self-defeatist behaviour. If we allow it to go unchecked, our young people can be limited in their aspirations or even avoid further study in Mathematics and STEM subjects.

The solution lies in good teaching and a commitment to opening pupils' minds up to see the bigger picture from an early

age. In Years 7 and 8 or even earlier, pupils need to understand entire contexts and also realise that Mathematics is so much more than just sums. They need to see the limitations in a problem and what a complete solution might look like. For example, imagine a circle of paper. If we cut a piece from that circle, what happens to its area and perimeter? Do they increase, stay the same or decrease? Take a minute or two to consider the answer.

Well, the area always reduces but, interestingly, the perimeter may reduce, may increase or may stay the same, depending on the shape that is cut out. This is not high level Mathematics, but this type of discussion is important for pupils if they are to make real progress and feel confident that they have the skills to solve problems without fearing unfamiliar situations. Thinking and talking like this helps pupils to see beyond routine sums and experience what Mathematics is really about.

Our Head of Mathematics speaks to Year 7 parents in October and explains to them that their sons and daughters should expect to struggle, that this is a good thing and an important part of learning. He tells them where they can find additional materials, how pupils are assessed, and he explains the extra support available. Parents need to be told to park their own Maths anxieties. In a five-minute talk he gathers support from parents and prepares them for the probability that their sons and daughters will find Maths homework challenging. As a result, they are able to back the school and encourage their children to develop vital resilience and determination when the work is difficult.

And it is not just our senior school pupils that are encouraged to embrace a developing love of Mathematics. As soon as they start in Pre-Reception, girls and boys are introduced to Maths, Technology and Science. From simple ideas such as sharing chocolate buttons (to boost their understanding of fractions) and seeing what kinds of objects float in water, it's never too early to start exploring STEM subjects.

Our youngest pupils recently learnt about robots, programming and computing, thanks to activities undertaken during a visit from Mrs Helen Saunders, Strategic Communications Manager at Cisco Systems. KS1 boys and girls

looked at programming, how it helped the robots move and how much we use computers in our everyday lives. The children enjoyed moving the robots around the hall and also watched a presentation and video that created discussion around artificial intelligence and what jobs might be like in the future.

As Mrs Saunders said, 'Talking to the pupils about robots and how they might impact on their lives when they become adults was a fascinating experience. Their awareness of technology, willingness to explore new ideas and to get involved was really impressive. We typically do this type of work with older pupils, however working with younger children provides an ideal opportunity to inspire an interest in STEM subjects early.'

The belief that the struggle is there to be immersed within and enjoyed is how we have developed such successful mathematicians and scientists at SGS. Every year, the school hosts a Maths competition for Year Five pupils from dozens of local primary schools. Competing teams are tasked with solving a series of mathematical problems in the fastest time to be in with a chance of taking home the coveted trophy. The energy and the excitement on this day is wonderful to see. As our then Headmaster Andrew Chicken proudly said last year, 'The Primary Maths Competition is the noisiest event in the school calendar!' The challenge continues, albeit more quietly, in the Senior School, where each year roughly 120 pupils volunteer for the Junior Maths Challenge, a hundred for the Intermediate Maths Challenge and ninety or so for the Senior Maths Challenge.

This year over 70% of girls have opted for at least one STEM subject at A Level and well over half of girls opted for two or more STEM subjects. The departments work hard to create a buzz around Maths and STEM. Competitions, World Maths

day, inspiration lectures, trips and workshops, all combine to create a busy and inclusive atmosphere. Working together is a great pleasure for our top mathematicians – our absolute top mathematicians are not at all arrogant about their ability. Having been taught well, every good mathematician knows that there is so much more Maths out there and, for all the material they have learned to conquer so far, there is always more waiting to be discovered and explored.

Maths teachers at Stockport Grammar School are skilled in posing the right question to the right pupil at the right time. The philosophy in the Maths department is that teachers are consistently positive with pupils about their ability to succeed, while pushing them to persevere until they are victorious and the question is completed. Whilst some pupils are naturally more Mathematical than others, the department are clear that all pupils can learn to think mathematically and get that 'top of the world' feeling from knowing they have answered well.

Of course there are some pupils for whom Maths and Science remains difficult. 'I just don't get it' can be heard in classrooms across the world, and we need parents as well as Maths and Science teachers, to respond with 'you mean you don't understand it yet'. We all need to work together to debunk the myth that ability in Mathematical subjects is mysterious and elusive. Mathematics is the most straightforward and certain of all subject disciplines. It is one of the great constants and can be understood by everyone, girls and boys alike, with enough patience and positive encouragement.

Donna Harris is Senior Deputy Head (Academic) at Stockport Grammar School

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

Bromsgrove's Emily Evans appointed as Organ Scholar

Bromsgrove School Music Scholar Emily Evans is delighted that the Dean & Chapter of St David's Cathedral have appointed her as Organ Scholar from September 2018. The Organ Scholarship will involve Emily playing a full part in the musical life of the Cathedral – playing during services, accompanying the choir, training the choristers and conducting the choir.

St David's Cathedral was built on the site of the monastery founded in the sixth century by David, the patron saint of Wales, and represents the spiritual heart of Wales. Her Majesty the Queen is a Canon of the Cathedral Chapter.

Emily has spent the last few months as a chorister at Worcester Cathedral, whilst studying the organ with the Assistant Director of Music, Christopher Allsop. 'I was over the moon when I received the news', said Emily. 'I hope to gain an Organ Scholarship when I go to university, alongside reading for a degree in Music, hopefully at Oxford or Cambridge, after which I wish to pursue playing the organ as my career.'

James McKelvey, Director of Music at Bromsgrove, said, 'We are absolutely delighted for Emily to have been selected for this great honour. She has only recently started playing the organ and is already a very accomplished musician, so this is a major stepping stone for her musical future.'





Lancaster
University

Lancaster is redefining what it means to be an 'elite' University.

Meet the 2018 University of the Year
at the HMC Autumn Conference.

Sponsors of the 1st October
Drinks Reception.



Leavers' Day

OR Houseman prefers the whimper to the bang

The prospect of Leavers' Day on the last day of the academic year can cast a shadow over the last few weeks of the summer term. The approach of the summer holidays used to be as much of a morale boost for housemasters as it was for the boys, and could usually be approached as a gentle winding down process, with slightly less to do each day. Once upon a time, schools combined their big day with the Summer Half Term, but this has now moved to the end of term, which therefore finishes with a day many housemasters consider to be the most tiring and demanding of the entire school year, just when they are in the depths of exhaustion and the peak of stress.

A schoolboy's final day at school used to be an unremarkable moment. I remember a particular example after a few years in the house. A boy looked into my study. I was at my desk, writing a letter to a new boy's parents. Once the Upper Sixth started to take, and then started to finish their A Levels, my thoughts moved on to next year's new boys. (This is, of course, an incomprehensible thought for a leaving Upper Sixth Former, who naturally sees himself as the centre of the universe and does not imagine, or even believe, that we can have anything else to do once he has left school.)

"I'm off now, sir."

"Sorry?"

"I'm off. Leaving. Just came in to say goodbye."

"Leaving?"

"Yes. Just finished my last exam."

"Your last exam, of course. Yes, that was this morning. Physics. How did it go?"

"Chemistry. Fine, I think."

"Good, good."



A slightly awkward moment followed. I may not see this boy again, I thought. After managing his school life for the last five years and watching him grow from an awkward adolescent to a confident 18 year old, should I not regard this as a significant moment? Should he not? Fortunately, it was quite clear he felt no more need to be dramatic or emotional than I did, and just wanted to start his summer holiday.

"Packed? Room organised? Is matron happy with it?" I asked.

"All done, sir."

"Good. Well, good luck. Let me know how you get on."

If I had not been in my study when the boy looked in after that last Chemistry exam, he could quite easily have left without even that conversation. In this way, on each day towards the end of term, another boy would finish his final exam and leave, one by one almost, until there might be one boy left waiting to take the last A level paper of the season, usually Ancient Greek or Further Mathematics, until he had gone too. It seemed a natural way for things to finish: understated, nothing momentous, no celebration. The Lower Sixth became the senior pupils for the last few days of the year and, by the time the summer holidays started, probably thought they always had been.

Then we had a new headmaster.

The new headmaster was known to be a great admirer of forward-looking American educational policies. In America, of course, they do things differently. Not one to be restricted by the stuffy and stifling traditions of English boarding schools accumulated over the centuries, he would not be looking to the English establishment for ideas, but to the bright, exciting, innovative thinking of the New World. Among other things he liked the way American schools celebrated their leavers. We knew all of this and were prepared for plenty of innovation. But the housemasters were still slightly surprised by Leavers' Day. At what we had approached as an unremarkable weekly break meeting early in the Summer Term he suddenly announced:

"You ought to have written your speeches by now."

He said nothing more than that and he moved to a different topic.

I spoke to the senior housemaster as we walked away from the meeting.

"I think I must have missed a meeting at some point."

"I don't think you've missed anything."

"Perhaps I didn't read an email."

"I rarely read emails. I usually imagine that if I am being asked to do something important then eventually somebody will come and ask me to do it. Doing nothing is invariably the best approach to an apparently urgent problem. It either goes away or solves itself."

"But I have definitely missed something."

"Why are you so sure?"

"Something he said this morning about speeches. 'You ought to have written your speeches by now', he said. What speeches?"

"Oh yes. I noticed that. No idea."

Look what you're doing

I learned little more in conversations with other HMs. Our confusion clearly reached the Headmaster. He addressed the topic rather more directly the following week.

"It is quite clear that some of you have not understood what I have been trying to explain to you. The Americans know how to recognise their leavers. English schools are hopeless at it. Always have been. We will not be. We will be having Leavers' Day. I introduced it at my previous school. It was a huge success. It will be a huge success here. On the last day of term all of the Upper Sixth will come back. There will be a chapel service for the entire school, then we shall give lunch to the leavers and their parents. Then we shall have a Leavers' Ceremony, at which every boy will shake my hand and every Housemaster will make a speech about his leaving Upper Sixth. The speech will be funny, affectionate, interesting and loving. And short. If you don't know your pupils well enough it will show. In the evening we shall have a dinner and a ball."

This came as somewhat of a shock.

"He doesn't mean it, does he?" the senior housemaster asked me after the meeting.

"I fear he does."

"It is absurd. Far too ostentatious. American. We just don't do that sort of thing. And it is impossible. How can we be funny, interesting, affectionate and loving? It just won't work. And it will take hours. I don't believe he means it."

He did mean it. An unfortunate deputy was given the task of organising the event. A school secretary spent the rest of the term organising ticket requests from parents. One week later we played cricket against the new Headmaster's previous school. I spoke to one of their housemasters whom I had known for some years.

"How's your new man?" he asked.

"He has just told us that we are going to have a Leavers' Day."

"Yes. He did that here."

"How did you cope?"

"We got used to it, I suppose."

"Isn't it absurd? A bit American, even vulgar?"

"Yes. It is all of those things. They love it."

They did love it. The pupils loved coming back, leaving together and saying goodbye. The parents enjoyed the occasion, and said it gave the experience of the last five years a tangible conclusion. Some younger teaching colleagues enjoyed the dinner and the ball. Even the senior housemaster seemed impressed.

"Well, I have to concede, that did go rather well. I shall never question a new idea from the headmaster again."

"Apparently he wants to do something similar for new boys at the start of term. A sort of formal induction ceremony."

"New boys? Induction ceremony? Ridiculous; he just doesn't understand this school."

OR Houseman awaits the introduction of baseball

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

Jack Petchey Award for Kate

Brentwood School pupil Kate Bowie-Britton has been presented with a prestigious Jack Petchey Foundation Achievement Award recognising her determination and triumph over adversity. Thirteen-year-old Kate, a member of both the Brentwood School Orienteering Team and Essex Stragglers Orienteering Society, suffers from a joint disorder, Hypermobility Syndrome with tibial torsion and femoral anteversion, which means that her legs do not point forwards. As a result, Kate often suffers from falls and has several problems with her muscles.

Due to her condition, Kate is not a fast walker, but she has found her niche in orienteering which requires competitors to be quick thinkers. Over the years, Kate has greatly developed both her map-reading skills and muscle strength and recently won the 2017 East Anglia Schools' Orienteering Championships for her age group.

Kate was nominated for the award by her sister Emma, who also attends Brentwood School. Big sister Emma said, 'Kate is a very dedicated and determined person who wants to succeed at whatever she does despite the limitations of her body.'

Kate has decided to spend her £250 Jack Petchey Achievement Award grant on a trip to the Essex Outdoors Centre in Danbury for her and her fellow orienteers.

Sir Jack Petchey CBE founded the Jack Petchey Foundation in 1999 to recognise the positive contributions young people make to society and to support them in achieving their potential. Since then it has provided support to a wide range of 2,000 initiatives supporting young people across London and Essex and has invested over £118m.

Sir Jack, aged 92, said, 'I am passionate about our awards scheme which enables young people to be recognised, valued and rewarded for their achievements and positive contributions to society.'





Against the odds

Caitlin Lambert describes a programme responding to increasing concern about the impact of gambling-related advertising and the normalisation of gambling for children

The independent educational charity Demos, Britain's leading cross-party think-tank, which focuses on original and innovative research, has been piloting lessons in secondary schools to prevent gambling-related harms among school age children.

Despite more opportunities than ever for young people to gamble, particularly online, tools to help prevent gambling harms are not being provided in schools. 25,000 children in the UK are currently classed as problem gamblers, and some 2 million adults classed as at risk of developing a problem, making early preventative education in schools a top priority.

Problem gambling is gambling to a degree that compromises, disrupts or damages family, personal or recreational pursuits. At-risk gambling behaviour identifies people who are at risk of problems related to their gambling behaviour but who are not classified as problem gamblers.

For the past two years, Demos, supported by GambleAware, has developed and tested a pilot education programme to teach children about the risks of gambling and where to go for help and support. The lessons were designed to build up resilience in teenagers in the face of the tactics that gambling companies use to encourage people to gamble. Educating the pupils about concepts such as 'delayed gratification' helped to improve their understanding of the nature of gambling and how to make good decisions when in any risky situation.

The four lessons were taught as part of the PSHE curriculum for 14-year-olds, reaching 650 pupils in selected schools across the country. Only 14% of the pupils Demos surveyed had been taught in school about gambling before the pilot and, prior to starting the programme, just under 40% of pupils surveyed did not agree that gambling was dangerous. This was reflected in the fact that 41% of students said they had participated in gambling within the last year, with the most common forms of gambling being using money to place bets (21%), followed by playing fruit machines (17%) and finally, playing cards for money (14%).

To evaluate the pilot Demos observed five lessons; conducted a tracked pre- and post-survey over 12 months for pupils at participating schools and nearby comparison schools where the lessons were not given; and held focus groups with pupils and teachers in participating schools during the Autumn term of 2016.

Over the 12 months Demos observed a statistically significant decline in the proportion of pupils playing cards for money, with a net decline of seven percentage points relative to the comparison group. The most substantial change was a net 20 percentage point increase in the proportion of pupils at participating schools relative to the comparison schools being able to describe ways to help someone experiencing gambling problems

Demos also saw a net 18 percentage point increase in pupils feeling that they knew where to go to talk about gambling problems; an 11 percentage point increase in pupils able to describe delayed gratification; and a net 10 percentage point increase in pupils understanding the techniques used by the gambling industry to persuade people to gamble.

Comments from pupils who had taken part in the research show that whilst they were already aware of gambling, they had not realised the scale of the problem until they attended the four lessons in the programme.

'I actually found them quite interesting because I didn't really know much about gambling and how you can get addicted. But we went into some depth and I learnt some new things. It was quite good how my form tutor presented them.' (Male, School B)

'At first gambling seemed like quite a rare thing but we didn't realise how easy it is to get addicted. And how bad it could be, but we learnt that I think.' (Female, School D)

'Lots of people won't think about going gambling, or they won't have it in their family, so these lessons won't be a lot of use because they won't necessarily need it in the future. Whereas other people might be looking into it, or gambling regularly, and they can see the effect that might have on them in the future – they can apply what they've learnt here to themselves and relate to it.' (Female, School B)

'If there was someone I knew when I was older then I would know what to do, you could help someone.' (Male, School C)

Encouragingly, more than 100 schools expressed an interest in taking part in the Demos pilot, signalling a significant awareness of the risks posed to young people from gambling harms.

To access the lessons, please see the online resources via the GambleAware website: <https://about.gambleaware.org/>

Commenting on the research, Simone Vibert, Social Policy Researcher at Demos, said, 'Given that young people are routinely taught about the risks of drugs, alcohol and underage sex, the fact that so few are taught about gambling is an anomaly. Problem gambling can wreak havoc on people's lives, not to mention their friends, families and the wider economy. Prevention is clearly preferable to treatment later down the line.

These lessons encourage pupils to weigh risk, manage impulses and advise others – all things that can help prevent problem gambling and other risky behaviour too. We therefore call upon the Government and schools to use these resources to help develop the skills and resilience of pupils, confident in the knowledge that they have been proven to make a difference.'

GambleAware, an independent national charity funded by donations from the gambling industry, commissions research to broaden public understanding of gambling-related harm, and funds education, prevention and treatment services. The

Look out

aim is to stop people getting into problems with their gambling and ensure that those that do develop problems receive fast and effective treatment and support.

Dr Jane Rigbye, Director of Education at GambleAware, said, 'There are legitimate concerns about the impact of gambling-related advertising and the normalisation of gambling for children. It is in this context, that GambleAware is pleased to have funded this project to explore what may be effective in helping children to understand the nature of gambling and the associated risks, and to become resilient to the harms that can arise. We hope the success of this project will support the case for including gambling and the risks it poses in the PSHE curriculum.'

The lessons were designed by Demos, the PSHE Association, The Mentor Foundation UK (Mentor UK), the National Problem Gambling Clinic and a range of independent teachers and advisers. The modelling and survey analysis was conducted by NatCen. In the words of an independent evaluation of the programme conducted by Richard Ives, 'This was a well-designed project that successfully engaged teachers in

delivering quality gambling harm prevention lessons covering the potential harms of gambling, exploring ways that people are encouraged to participate, and helping pupils to keep safe. The lessons were embedded in the PSHE curriculum, where they stand a much better chance of being effective than do 'stand-alone' gambling interventions in schools.'

The results were submitted to government as part of a recent consultation on the content of PSHE lessons, and both Demos and GambleAware highlighted the need to include gambling-related harm when teaching children about risky behaviours.

Caitlin Lambert is a member of the Demos external affairs team with an MPhil in History from the University of Bristol

To learn more about GambleAware go to <http://about.gambleaware.org/>.

For more information about this research project, contact:

Caitlin Lambert – Demos | 020 7367 4200 |

(Out of Hours) 07826520552

Sarah Evans – Atlas Partners +447523 609 413

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

Nikita believes in Project Access

Nikita Khandwala is looking forward to the 10-week internship in the Data Lab at global engineering giant Rolls Royce that she won through her success in the Female Undergraduate category of the Undergraduate of the Year competition.

Nikita, who was Head Girl at Burgess Hill Girls, and has just completed her second year reading Spanish and Linguistics at Hertford College, Oxford, is part of the executive team running an organisation called Project Access, dedicated to fighting inequality in higher education. It matches talented university applicants with mentors who are current students at the world's best universities. They provide applicants with information, application feedback and support throughout the application process.

Nikita says that both her school and her background were instrumental in developing her interest in helping those who weren't able to follow the path that was made available to her.

'I'm definitely interested in widening access precisely because I was independently educated and because of my Indian descent; both my parents were first-generation immigrants to Britain. I always knew I was extremely lucky to go to Burgess Hill Girls and to get the opportunities I had. And I knew that all the hard work both my parents, who are NHS surgeons, have put in since they came to this country has been for me and my sister.'

Nikita's work with Project Access couldn't be more topical, with Oxbridge recently under attack from Labour MP David Lammy, among others, for its slow progress in widening access to students from non-traditional backgrounds, after data revealed that there are Oxbridge colleges that have failed to admit a single black British student in recent years. And Universities Minister Sam Gyimah hit out at Oxbridge for its 'staggering' failure to attract more black students, saying that colleges must look beyond exam results to improve diversity.

Nikita pays tribute to Burgess Hill Girls for helping her get to where she is today. 'Teachers weren't pushing everyone to get into Oxbridge. The great thing was that whatever you wanted to do – music, art, sport as well as academia – they supported you. They didn't push you into a particular area of the curriculum. I very much had the opportunity to forge my own path.'





Bridging the IT skills gap

Graham Smith explains how changes in education can meet the increased demand for IT skills.

Today, more than 1.5 million people work in the digital sector or in roles related to digital technology, and the number of digital technology jobs across the UK is growing at twice the rate of other jobs. But are we properly prepared for the future?

Today's young people and students are digital natives, surrounded by technology since birth. That said, this familiarity doesn't necessarily mean that they possess an in-depth understanding of IT and computing, or how to use it within a business setting. In fact, when it comes to calculating how many people receive a formal technical education, the UK's students are placed 16th out of 20 across developed economies.

Britain's IT skills gap is no secret. According to a survey from the British Chambers of Commerce, firms are finding it harder than ever to recruit skilled workers — almost three-quarters of service providers are struggling to make the hires they need. According to reports, skills shortages reached a critical level in the last quarter of 2017, with a record number of firms reporting recruitment difficulties. So how can today's young people transition from being digital natives to being digital workers?

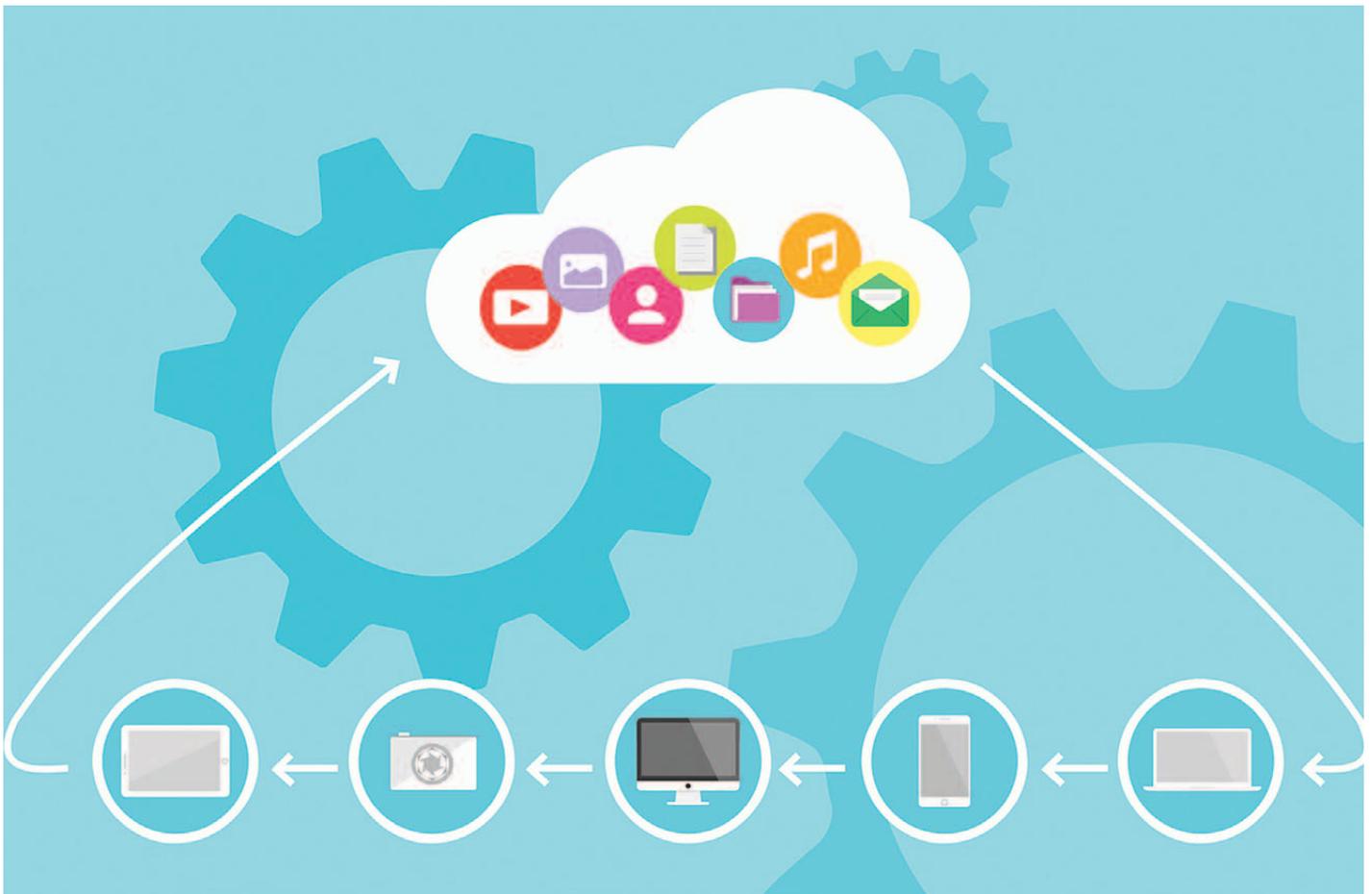
In 2015, only 15,000 British students sat an A-Level in computing or ICT. This accounts for less than two percent of the overall exams set. As a result, there are only a small handful of school leavers moving on to higher education study in this

field. What's more, despite multiple schemes and initiatives to increase this figure, the number only grew by around 500 students in 2016.

Competition to find the right candidates is particularly high for roles that require niche skillsets. Specialists in Microsoft Azure, for example, are feeling the benefit of having some of the most in-demand skills in the industry. As the central pillar of all Microsoft projects, there is an evident skills gap in this area, and because of this, specialists can charge a premium. But how many school-aged students have ever heard of Microsoft Azure, let alone are enthused enough to pursue this specialism after higher education?

One of the criticisms of the IT industry is that the sector isn't attractive to young people. According to a Mondelez International survey of more than 1,500 teenagers, 44 per cent believed that Science, Technology, Engineering and Maths – the STEM subjects – were uninteresting. What's more, almost half of the participants considered STEM subjects to be less enjoyable than other subject areas. There have been several initiatives to improve the perception of IT in schools, such as Microsoft Education. This scheme encourages the digital transformation of schools by promoting the use of technology in every aspect of education, not just for lessons in IT and computing. The goal is to ensure that every student leaves the education system with





an understanding of how to use technology. But, while schemes like this do improve general IT competence in schools, how will they address the wider issue of a lack in advanced IT skills?

Ultimately, this comes back to the reputation of IT among young people. The existing IT course taught in schools has been dismissed by critics as 'teaching little more than how to use Microsoft Office'. However, in today's environment, using this kind of software should be an essential skill, like reading, writing or basic numeracy. By integrating IT skills into every aspect of learning with Microsoft Education, those students interested in more technical computing skills can pursue more advanced areas of IT.

Perhaps ironically, the IT skills gap has been caused by the overwhelming success of the UK technology sector. Yet, this success isn't enough to entice young people to take up a career in IT. Since it is clear that the university route isn't suitable for everyone, the introduction of T-level apprenticeships provides new hope. T-levels, introduced in the 2017 Spring Budget, will allow 16 to 19 year-olds to study and gain digital skills through real-world experience. The government describes its plans as the 'biggest overhaul of post-school education in 70 years', with T-levels replacing thousands of courses currently on offer.

Students can only learn so much from a training programme in the comfort of a university campus. In the real world, there are deadlines, compromises and increased pressures. This lack of understanding of real-world IT in traditional education reinforces the value and need for T-levels. As a specialist recruiter for the IT industry, Curo Talent has identified that IT organisations aren't necessarily looking for candidates with bachelor's degrees in computer science, but rather the

determination and technical understanding needed to complete a project on time.

The education changes are expected to come into effect in 2019, with additional funding of over £500 million per year once the courses are up and running. As with all initiatives, however, it will take time for the results to filter through, so the IT industry shouldn't expect a quick fix. According to a KPMG report, Britain has spawned 45,000 technology companies in the last five years, the equivalent of one new business every hour. If the industry is to continue to grow, there needs to be an influx of new talent to build the IT infrastructure of these new companies. The consequences of not bridging this skills gap will result in adverse outcomes for the UK economy.

Additionally, the Office for National Statistics suggests Brexit uncertainty is damaging the UK's reputation as the jobs factory of Europe. As a result, there is a reduction in EU talent moving to the UK to work. This makes it more crucial than ever to develop home-grown talent, and an overhaul of the UK's technical educational must be the first step.

If the UK is to sustain its technology boom, it is vital that technical education should remain a long-term government priority so that there will be the talent available to fill digital technology vacancies that continue to grow at twice the rate of other industries sectors.

Graham Smith is head of marketing at Curo Talent, a Microsoft talent solutions partner and the 'Smart Team Freelance Partner' for the UK. Curo Talent offers end-to-end consultancy and provides recruiters with talented candidates



Rethinking education for the age of automation

Rohit Talwar and the team at foresight firm Fast Future look at some of the experiments needed now if society is to navigate the world of the future

If we're to thrive in an automated world we need to re-think our education. Jobs and the required skills will be different in the future – and that future is closer than we may think. With the growth of Artificial Intelligence (AI), automation and robotics, we need to acknowledge the shift to a graduate workforce; expand access to relevant education by opening up underused facilities and bringing business on board; abolish student debt and tuition fees; and pay (re)training and education salaries. We must ensure that advances in AI and automation are harnessed to unleash individual potential and enable a very human future. By waiting too long to address the issues and shift our approach to education, we could find that we are simply too far behind to ever catch up. Now is the time to consider the options and opportunities and ensure that we, our children, and our children's children are all in a position to make the most of them.

We're in the middle of a crucial debate about the potential impact of AI and automation on specific tasks, roles, jobs, employment and incomes. It shows no signs of slowing, and we are being presented with a range of predictions, from the doom-laden spectre of mass unemployment to the exhilarating challenge of creating a wave of jobs, some of them entirely new. This debate is clearly of great significance to anyone involved in education, since it raises questions about the skills and knowledge our young people may need to navigate a very different future, questions of both a policy and a practical nature.

At present the world is legitimately clueless about five key factors.

1. How far and how deep these new technologies will actually penetrate over the next five to twenty years.
2. The scale of opportunities that will be generated in the new sectors and businesses that might emerge.
3. How the nature of work, roles, jobs and workplaces may evolve over time.
4. How governments, businesses, educators and individuals might respond and the innovative solutions that may emerge.
5. What the net impact might be on employment and the economic prospects for today's children and young people.

We need to think the unthinkable. This means considering how to go about preparing the current workforce and the next generation for an uncertain future; creating new jobs and businesses; supporting the unemployed in a fair and dignified manner that positively assists their search for opportunities; and funding the transitions from this economy to future ones.

The key to all of this is education. It's becoming abundantly clear that at the national, business and individual level, what will determine our ability to survive and thrive in a rapidly evolving landscape are our levels of education and big picture awareness. Our capacity to navigate a turbulent landscape will be driven by a number of factors: our understanding of how the world is changing; our digital literacy; our capacity to think, reason and solve problems; our ability to learn new skills and approaches quickly; and our mastery of life skills such as collaboration, scenario thinking, coping with uncertainty and handling complexity.

We need to help our young people to develop these skills and prepare them to move from role to role in a world where job tenures are shortening and lifespans could continue to increase. They will also help a new generation to start their own businesses and take greater responsibility for their own livelihoods. This is something that could become an increasing priority as medium to large organisations reduce their workforces as a result of competitive pressures and automation. We can see an increasing pressure on small to medium enterprises to provide the bulk of employment across the economy, which will even affect future careers in large organisations. Here are some of the key policy experiments we are advocating.

It is now common for business executives to attend immersive study tours to meet new ventures in emerging sectors, or to spend one or two weeks taking part in transformative courses at institutions like Singularity University. These are designed to accelerate 'mindset change' in organisations, by providing a crash course in the ideas shaping the future and the technologies that might deliver them. A similar, lower cost, society wide option would be to create a range of such programmes ranging in length from a weekend to a month. They would combine business visits, lectures and projects, and discussions with innovators, change agents and entrepreneurs. The programmes would be aimed at those in work, the unemployed, students, parents, teachers and those who realise their business has to change. The faculty could be drawn from business, academia and those in the local community who are retired or unemployed, but have a desire to serve and grow at the same time.

Automation seems highly likely to reduce the number of lower and mid-level skilled jobs in the economy. We can see a scenario where, within five to ten years, 80% of the new jobs created will require graduate level education or equivalent. This means a cornerstone of any employment policy has to be to

Look ahead

ensure we are readjusting the skills and knowledge base in the country at every level. In particular, this means encouraging and incentivising adults to enter into continuing education while still in employment. Equally it means confidence building programmes for the unemployed, basic literacy support for those who have been left behind, and a massive expansion of access schemes to allow those with few or no formal qualifications to transition into higher education.

Funding will always be an issue, but the cost of inaction and a poorly educated workforce could far outweigh a large-scale expansion in provision. This could be delivered in innovative ways by, for instance, encouraging firms to sponsor local education programmes either through direct funding, providing tutors, or allowing the use of their meeting and training room facilities during the day, in the evenings, and at weekends. Vacant facilities in schools, colleges, and universities could also be used in the same way.

A key part of the learning agenda here would be to take people into the new and emerging businesses to help them understand the changing nature of work and workplaces and learn about the skills they require now and in the emerging future. Support systems could be provided for communities to self-organise education and skills programmes, sourcing tutors locally, and using attendee ratings and feedback to determine who best serves the needs of local communities. Clearly, pump priming might be required for areas where no such local tutoring talent exists, but the key is to try a range of experiments, share the experiences, and scale the best practice models for different types and sizes of local communities.

In the UK, students are typically finishing higher education with debts ranging from £30,000 to £60,000 and, in many cases, with poor job prospects and relatively low morale. This is the very group that needs to be inspired to create new ideas, services and businesses for a changing world. Hence, a cancellation of student debt and individually paid tuition fees might help to make it more attractive to go into higher education, especially if meaningful student grants were reintroduced.

For those who are made redundant or struggling to find work in their current sector, an option might be to retrain for a new career or in a different sector.

Here, a government funded salary could be payable for the duration of a training programme or degree course.

To help deliver on such retraining requirements, new salaried models of vocational training could be developed by evolving existing professional bodies and creating new ones. Their primary purpose would be to help to develop the skills and personal competencies required for the new world of work. These programmes would combine work specific training, workplace placements, and the development of general work, business and social skills. A training salary would be paid throughout the retraining period to take away the associated stress of taking time out to learn new skills. Finally, continuing professional development might have to become compulsory or be incentivised through the tax system to encourage individuals to keep acquiring skills to help them move from job to job.

Alongside preparing young people, reskilling the nation's adults and changing mindsets, a parallel process is required to help stimulate new jobs and the businesses and industry sectors that will provide them.

These are some of the many ideas we have been exploring for how to address the challenges presented by a world that is in transition. You won't be surprised to learn that there are no answers at present. However, there are ideas that warrant investigation and experimentation. We need bold leadership to take these ideas and launch experiments to see how we can educate young people, reskill society and create new job opportunities for the future.

Fast Future's Rohit Talwar, Steve Wells, Alexandra Whittington, April Koury, and Helena Calle specialize in delivering keynote speeches, executive education, research, and consulting on the emerging future. Fast Future publishes books from future thinkers exploring how developments such as AI, robotics, exponential technologies, and disruptive thinking could impact individuals, societies, businesses, and governments and create the trillion-dollar sectors of the future.

Web: www.fastfuture.com

Twitter: twitter.com/fastfuture

Blog: blog.fastfuturepublishing.com/

LinkedIn: www.linkedin.com/in/talwar

Please contact the authors via Dorothea Stuart at Panpathic Communications, Dorothea@Panpathic.com, 020 8891 2669





No more jobs for life

Marina Gardiner Legge believes it is vital that schools prepare students for the many unknowns they will face in their future working life.



With the economy changing, markets becoming more global, and increasing automation leading to huge changes in industry, how can schools help students to develop the crucial life skills that will equip them for multiple careers in an ever-changing workplace?

I firmly believe that every educator knows that a full education is not just a question of grades on a page. Rather it is about inculcating curiosity and a critical sense in a young person, together with attributes known as ‘character’ skills, such as resilience, determination, courage, challenge, moral courage, compassion and empathy – to name just a few!

*Life Lessons*¹, a new report from the Sutton Trust in October 2017, highlights the recognition among teachers, employers and young people that these attitudes, skills and behaviours underpin success in school and work. In order for these values to flourish they must be embedded in all aspects of school life – assembly, chapel (if a part of the school), the staff room, parent interactions and all relationships built with stakeholders. Students can benefit from using a portfolio structure, such as we use at Heathfield, to gather evidence of having successfully employed these skills.

If we are to educate our students to value and develop their imagination and creativity, to become more collaborative and to see innovation as a worthwhile goal, then we need to look beyond the traditional school curriculum. Extracurricular activities must offer value-added opportunities, giving the

students the chance and the time to pursue their own interests, to be confident and motivated and to relish fresh challenges.

Variety is key to creating rounded, kind and courageous young people. Debating is excellent for creating resilience and celebrating a quick and critical mind and a game of lacrosse on a wet cold muddy day for developing determination and stamina. Volunteering is valuable for helping to develop compassion and an understanding of modern British society. Choosing several activities should be compulsory, since young people can be naturally apprehensive of something they haven’t tried before and yet they will probably love it. I haven’t met anyone who has completed a Duke of Edinburgh’s Award who hasn’t been tremendously proud of what they’ve done. Students need to be encouraged to try everything and if they are lucky enough to have the opportunity, they need to get stuck in, and this will help them in the future too.

Aside from extracurricular activities, there are simple but effective classroom strategies, open and accessible to every teacher, to help pupils develop non-academic skills:

- Praise the effort rather than the end result which, although tricky with examinations, is a crucial element of positive education. Our pupils need celebration of their efforts, not just the final grade at the end. When parents and school focus on the amount of effort a child has put into a piece of work, it is really effective in building confidence.
- Encourage children to take risks and then empower them to correct their work. This takes away the sense of being

1. <https://www.suttontrust.com/research-paper/life-lessons/> Research Author(s): Carl Cullinane, Rebecca Montacute



judged which unfortunately so many children have. In my English classroom I would always celebrate children who used more ambitious vocabulary but spelt the words incorrectly rather than sticking to simpler words with 'safe' spellings. It's amazing how a positive approach can really change a child's attitude to risk taking.

- Be explicit about the skills being taught and highlight them when talking to pupils. 'I'm impressed by your perseverance here; you went back and reviewed your work well.' The more we adults make it clear what skills we prize, the more pupils will be able to articulate and understand their successes.

To succeed in a workplace that is constantly evolving, young people will need to be adaptable and able to learn rapidly, and to take the lead in careers that don't yet exist. They will require imagination and 'big picture' thinking to find creative original solutions. But how can teachers target these skills in school?

It's so important, isn't it, to daydream, to experiment and even to be bored. By taking away all devices in the younger years at school, children are sometimes given free time in their lessons to come up with imaginative, thoughtful ideas. At Heathfield we also have a session called 'Learning to Learn' in our Lower School, which focuses on metacognitive skills such as self-reflection, where the pupil considers the different skills that they have to use in each lesson. In the Upper School, every pupil is offered the Extended Project Qualification, which can range in content from a musical or artistic artefact to a dissertation-like project. With freedom comes creativity and passion.

Just as daydreaming should be valued, so too should a sense of realism and understanding how skills relate to the workplace. The more that schools and employers work together to demystify the world of work the better. Employers coming into schools and talking about their jobs is hugely helpful for pupils, as are tours around the workplace. Parents need to talk to their children about what they do all day, and recent graduates who are now in the workplace coming back to schools and talking about their experiences can really help young people to understand what is required and how to seize every opportunity – including making the tea on the first day!

One of our roles as schools is to provide students and parents with as much relevant information as possible to make meaningful decisions and choices in their career paths. Right from the very first year of secondary school, students should have a structured programme that leads from exploring who they are, for example, and where their strengths and weaknesses lie, through to matching those with particular career choices and then Higher Education. The more links a school has with its local community, the easier it is to facilitate work experience and contacts with previous leavers from the school to empower current students. The best careers guidance is personalised, independent and ever-changing to reflect the new needs of the world outside.

Marina Gardiner Legge, an Oxford graduate, started her teaching career in Hong Kong before moving to London. She joined Heathfield School as Director of Studies in 2013 and became Headmistress in September 2016.



The route into medicine

Janice Liverseidge explains how a new scheme is helping sixth form students tackle the arduous journey involved in applying for medical school

It is no secret that sixth form students wishing to train as a doctor face an exceptionally demanding application process that can defeat even the brightest and most single-minded of pupils.

To start with there is a minimum requirement of three As at A level or equivalent qualifications. Then there are admissions tests with students required to take either the UK Clinical Aptitude Test (UKCAT) or the BioMedical Admissions Test (BMAT). The UKCAT assesses a range of mental abilities identified by medical schools as important, such as verbal, abstract and quantitative reasoning, decision making and situational judgement. With the BMAT, students face problem-solving, verbal and spatial questions, as well as biology, chemistry and physics questions and a tricky essay. Students will also need to undertake relevant work experience in a caring environment, which is often considered when universities are reviewing personal statements and at interview. Finally, there are interviews for those selected, which can be in a number of formats including multiple mini-interviews and panel interviews.

Thankfully there is plenty of information online about how to approach this daunting application process, and there are organisations offering support to aspiring medics, such as The Medic Portal, who help us deliver the Royal Society of Medicine (RSM) Sixth Form Student Membership Scheme.

The RSM Sixth Form Scheme

As a charity, the RSM has a mission to deliver public benefit by advancing health through education and innovation. While most of our activities are focused on postgraduate medical education, we are committed to widening access to undergraduate medical education and have a well-established medical careers programme.

With a desire to make RSM resources more widely available to school students, we launched our Sixth Form Student Membership Scheme in Autumn 2017. Since then, over 250 sixth form students have benefited from invaluable guidance as they prepare to apply for medical school. There is a good take-up across the UK with sixth form students from London, Manchester, the Midlands and Northern Ireland, as well as other locations, taking advantage of the scheme. Part of the attraction must be the low membership fee of £35 which makes membership possible for students across the board. The one-off subscription covers students until they start medical school or their undergraduate degree course.

What are the benefits for Sixth form students joining the RSM scheme?

A free place at an RSM medical careers day

In the 2017/18 academic year these popular conferences were held in London, Hull and Norwich. Titled 'So you want to be a

doctor?' the day-long events offer practical advice on the process of university application. Guidance is provided on choosing the right medical school, how to approach interviews, and how to find relevant work experience. Delegates also hear first-hand accounts of life as a medical student and from trainees progressing through their careers as surgeons, physicians and general practitioners.

Access to The Medic Portal online resources

This offers access to mock preparation questions for the UKCAT and BMAT admissions tests; interview practice questions and tips; medical school selection advice; and help with writing personal statements for medicine.

Use of a world class library

The RSM is home to one of the largest medical libraries in the world and sixth form members have unlimited access to an extraordinary collection of reference books and journals, as well as study areas with access to PCs and free Wi-Fi, free printing and photocopying.

Free online education material

This opens up over 5,000 e-journals, 8,500 e-books and a comprehensive back catalogue online. Membership also includes access to the Journal of the Royal Society of Medicine, which publishes an eclectic range of articles, from evidence-based reviews and original research papers to commentaries and personal views.

Free events

The RSM scheme brings free entry to a number of RSM events, including the twice-yearly Medical Innovations Summits that gather together entrepreneurs and innovators developing exciting new therapies and technologies. There are also free public talks covering a wide range of medical and healthcare topics; and discounted delegate fees on offer for global health lectures and other meetings of interest to school students.

Information on how to apply for the sixth form membership scheme is available on the RSM website (see link below).

The RSM and The Medic Portal have also worked together to develop a scheme designed to help students from disadvantaged backgrounds to apply for medical school. Launched in 2017, the mentoring scheme has so far had a 100% success rate. All 13 of the participating students applying for medical school through the scheme received at least one offer to study medicine. The students, all from London-based schools and sixth form colleges, received a combined total of 18 offers.

The scheme provided tailored support for students throughout the application process over a year-long period. 17 students started the programme, with the four deciding against applying for medicine receiving support with applications to other courses.

Each student was allocated a medical student and doctor mentor for individual tutoring and application support.

Look ahead

Monthly events designed to prepare the students for all aspects of the medical school application process included workshops on mastering the UKCAT and BMAT admissions tests; an interview preparation day; and visits to university open days. All students received free access to The Medic Portal online resources and the RSM library and online educational material.

Dr Christopher Nordstrom, The Medic Portal, said: 'The UK needs to be training doctors from all backgrounds to reflect the society they will be working in when they are qualified. This scheme proves that talented and motivated students from disadvantaged backgrounds can gain entry to medical school if the support is there to guide them through the exceptionally demanding application process. Our medical student mentors, Afra Jiwa and Anam Ijaz, were an integral part of the scheme, inspiring, teaching and building confidence for all participants.'

The programme was funded through donations by private individuals. Future funding and support is being sought by companies, organisations and universities looking to promote

widening access, equality and diversity in medicine and allied healthcare professions. Interested parties should contact chris@themedicportal.com.

Janice Liverseidge is Director of Communications and Marketing at the Royal Society of Medicine, one of the UK's leading providers of postgraduate medical education.

Useful references

Medical Schools Council: Entry requirements for UK medical schools

www.medschools.ac.uk/media/2357/msc-entry-requirements-for-uk-medical-schools.pdf

RSM Sixth Form Student Membership Scheme

www.rsm.ac.uk/about-us/joining-the-rsm/sixth-form-student.aspx

The Medic Portal

www.themedicportal.com/





Life after school: looking beyond university

Claire Granados urges teachers and schools to provide more open-minded careers training and wider post-18 options, so that students and parents can rethink their attitudes to further education and the key skills required for business



91% of independently educated students went on to higher education in 2017, according to the Annual Census from the Independent Schools Council (ISC). Congratulations are, of course, in order for these students. Nevertheless, when this high figure is set against the national average, it raises questions for the independent sector.

Independent school leavers are often conditioned to feel that it is a failure on the part of themselves, their school and their parents if they do not attend a Russell Group university. In fact, goals are often set so high that Oxbridge is viewed as the only acceptable level of attainment. The £286,000 cost of an average independent school is viewed as a specific investment for a spot in a top-tier university.

I firmly believe this expectation needs urgent readjusting. As Principal of Quest Professional, I come across many students who feel that university is not the right choice for them, but still want to find success in the world of work. The issue for many is that they simply aren't aware of alternative options.

Young professionals who complete apprenticeships in companies like Rolls Royce, KPMG and Barclays often gain higher salaries than the average university graduate. Business apprenticeships and executive PA courses allow for a faster entry into the job market and the apprentices are immersed in their company from day one. In contrast, at university many students exist in an isolated 'bubble' that can make the transition into working life tricky.

For practical and less academically-minded students, alternative further education routes are surely more valuable than a degree from a lower-tier university. In the past, further education was recognised as a valued route to numerous highly esteemed professions, including accounting and finance. Many employees starting off in apprenticeship roles progress to positions such as branch managers, team leaders and even senior leaders – prestigious jobs all coveted by graduates too.¹

These routes come without the financial pressure of university and with workplace opportunities. At Quest, our training programmes provide internships that allow our students to build experience in the London job market and form a foundation for professional development.

Charlie Wood, a Business Apprentice Programme graduate, was employed full-time at a large bank after his work experience at the company, facilitated by the Quest careers team.²

Geri Ivanova is another recent graduate from Quest Professional, having completed the six month Executive PA course. She joined the 87% of our students who find employment within eight weeks of graduating. Now, she's Executive Assistant to the Business Line Head, Trading Head and Sales Head for London at BNP Paribas – the world's eighth largest bank and a world leader in global banking and financial services.

Despite Geri's uncertainty about whether university would be the right route, her school, like many others, did not provide alternative options. Because of this, she says, 'I applied to university without giving it any detailed thought. Despite gaining all my university choices and accepting a place at Westminster University to study business, I still had reservations and began reviewing other options.' With her professional qualification and experience working for a fast-paced company, Geri knows first-hand the most important skills for business: 'time-management, business communication, IT skills, and career development.'

In contrast to the skills Geri was equipped with, 49% of businesses stated that they consider most 'graduates do not have the skills expected of them at the point of hiring', according to the latest survey by the Association of Graduate Recruiters.³ If a

1. joinus.barclays/eme/apprenticeships/higher-apprenticeships/leadership-&-management-higher-apprentice/
2. www.questprofessional.co.uk/testimonials.aspx
3. www.justoncampus.co.uk/wp-content/uploads/2016-AGR-Annual-Survey-2.pdf



prime motivation for attending university is to find a job, why is university promoted above other routes? It's time for ambitious young people to discover options other than higher education.

Schools need to facilitate this rather than push their students to apply to university. As a former business leader, I agree that UK institutions need to address the lack of key skills amongst graduates. They should reform their courses for job-seeking students to hit the ground running. Educational institutions too often forget that soft skills are the backbone to career development, not academic prowess and qualifications.

Effective team work, for example, is essential. Schools and universities tend to focus on individual attainment and marks, but in the business world, an important element of success is positive communication with others and reporting to superiors. Performance is measured in terms of the company, not just individually. For career progression and a constructive work environment, fostering a good attitude and positive relations with colleagues is a must.

In the digital age, with the advent of hot-desking and working remotely, there is some belief that traditional office skills are becoming obsolete. This is far from true – shorthand is taught on both Quest's Executive PA and Professional Diploma course. The rarity of the skill means it can be the deciding factor when employers look over CVs. Working in a fast-paced corporation may mean taking minutes, noting down lengthy spoken instructions from the boss and recording telephone messages. Shorthand allows you to capture this information quickly and accurately, enabling employees entering the workplace to communicate effectively and manage their time well.⁴

4. olabisiblog.wordpress.com/2017/02/02/importance-of-shorthand-to-digital-age/

Sector and role specific skills are also important. For executive personal assistants, mastering diary management is an essential component of preparation for work. Big companies contain a huge number of employees, all with differing roles and responsibilities. It is vital that they are all 'on the same page' to streamline business processes. An employee who can direct their time and their diary scheduling efficiently means increased productivity and control, as well as fewer disgruntled colleagues and clients who can't get a slot for a meeting or interview!⁵

If young people are taught skills tailored for the workplace, I firmly believe they will have been given the best head start for the career of their choice. With enough motivation and determination, they stand a greater chance of success than merely attending university.

A former teacher, Claire Granados has built on her success in the world of educational management and is now Principal at Quest Professional, a business college focused on equipping A-level and university leavers with the business acumen and employability skills needed to enter the job market. She is passionate about changing perceptions of further education, particularly within the often university-centric independent sector, and improving confidence in students to help them achieve success in their chosen career.

5. www.smart-pa.com/uk/smart-thinking/post/15-useful-tools-for-successful-diary-management



Why TEF is good for students

Myles Smith and Laura Hughes review the new tertiary education assessment

Universities up and down the land have either been celebrating or concerned about their results in the Teaching Excellence Framework (TEF), with some big names scoring surprising results. The TEF is the Government's new method of assessing the quality of teaching delivered by higher education providers, graded by Gold, Silver or Bronze awards, and it is designed to give students better information to help them decide what and where to study. Students might at first disregard the results as just another league table, but with the TEF there are some significant differentiations that are worth a closer look. So, what does this mean for students looking for a top university, and how will it help them choose?

When the major league tables look at each university, they tend to focus on absolute performance, so it stands to reason that the 'top' providers get the best scores. Research-intensive universities have for years dominated the higher positions in the traditional ranking, but this is challenged by the TEF's focus on quality of teaching. Unlike almost all other higher education league tables, research performance makes no difference to the outcome of the TEF ratings.

Furthermore, entry grades are not used as an indicator of quality as they are in other methods of evaluating universities. It is true that a better cohort tends to perform better and have the best outcomes. Institutions bringing in the highest numbers of students with AAA grades are expected to have more students graduating with a good honours degree, 2:1 and above. However, the TEF benchmarking system transforms raw data into a measure of value-added. Applying this to graduate prospects, future earnings and the whole range of TEF metrics, builds up a picture of how any given university should perform, relative to its specific intake of undergraduate students and their entry qualifications, subjects studied and characteristics. For students who are considering which education provider to choose, this shows clearly which ones are outperforming expectations and therefore adding the most value to their students.

The TEF focus on teaching and adding value is a positive step towards making universities and their academics even more accountable for the outcomes of their students. Dr Eylem Atakav, Senior Lecturer in Film and Television Studies at The



Look ahead

University of East Anglia agrees. ‘You can achieve a lot by thinking differently about education. Academics don’t belong in ivory towers, focusing only on their own work. We must understand students and what they want, and involve them in what we do and our professional networks. I believe that it’s vital to take students outside the classroom to inspire them and truly prepare them for the world of work.’

The underlying data for the TEF was similar to that used by other major league tables such as: the National Student Survey (NSS), which gathers undergraduates’ opinions about their course and is one of the most influential sources of information for prospective students; the Destinations of Leavers from Higher Education Survey (DLHE); and various other HE statistical metrics, including continuation rates and learning environment. However, instead of ranking these directly, results were flagged either negative or positive. The Higher Education Funding Council for England (HEFCE) describes flagging as highlighting results that are significantly different from what was benchmarked, and if a provider is more than 3 percentage points and 3 standard deviations away from their benchmark, then a double flag is applied. In terms of the final results, providers with 3 or more positive flags are provisionally awarded a Gold award, while ones with two or more negative flags are initially considered Bronze, subject to panel assessment.

Unlike any major league table, universities had a right to reply to the TEF assessment, because it is a voluntary initiative. Panel submissions allowed each university to provide context to the data, explain any variance against expectations and, crucially, show how they intend to address any negatives. If the panel was satisfied that a provider was taking the right steps to tackle any negatives, a different result could be awarded. Likewise, if the panel was not satisfied that the performance of an institution could truly be called Gold standard, then it could be reclassified, preventing Universities from adjusting their metrics to change league table performance.

With the TEF, students can rest assured that institutions are not only outperforming expectations, but also satisfying a panel of HE experts that they are deserving of a Gold Award. Likewise, those providers that are significantly underperforming relative to expectations are highlighted to students for the first time. Top performing students deserve a university where they will be able to be the best they can be and a university rated Gold in TEF is currently a strong indicator of that. What’s more, from 2019/20, things will become even clearer for those considering university, since the government plans to publish ratings for specific subject areas alongside higher education providers as a whole.

Myles Smith and Lauren Hughes are Higher Education Advisers at UEA, Norwich, of which they are both graduates

HERE & THERE

If you have news of topical interest, however brief, for ‘Here and There’, please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

Ipswich High School pupils exhibit their work at Jimmy’s Farm Festival

Art and Three Dimensional Design pupils from Ipswich High School are exhibiting work at Jimmy’s Farm Festival, a local celebration of art, agriculture and food. Sculptures made by Year 12 students, as part of their A Level in Three Dimensional Design, will be exhibited in the vegetable garden at Jimmy’s Farm for the Summer and on show during the festival, whilst willow animals crafted by Year 8 pupils will be on show in the festival’s grounds.

Head of Art at Ipswich High School, Imogen Vickers, commented, ‘Following a trip to Jimmy’s Farm to gather source material, and sketches to design various farm animals, Year 8 students worked with great enthusiasm to create a spectacular collection of life-size willow sculptures. They persevered with the challenges of construction and worked well collaboratively. We are looking forward to seeing them displayed at Jimmy’s Festival.’

Head of Three Dimensional Design at Ipswich High School, Joe Earley, said, ‘It has been a really exciting year for our Year 12 Design students who have had the opportunity to work with Jimmy’s Farm and produce a series of large structures for their summer festival in July. They have agreed to display their work in their grounds near to their vegetable patch throughout the summer holidays. All designs were inspired by a trip to Aldeburgh.’



Career streams from STEAM Fair

Over 200 students from five Berkshire schools were lucky enough to hear molecular biologist, geneticist and television presenter, Dr Emily Grossman, deliver the inaugural STEAM lecture at Leighton Park School's STEAM Careers Fair

Dr Grossman recently joined Astronaut, Tim Peake, as one of the nation's two Honorary STEM Ambassadors and, using her phenomenal talents, she aims 'to show people just how exciting science is, and to make it more accessible by explaining complex concepts in a fun and engaging way.' Describing herself as a Science communicator, she uses her website to explain:

'I'm an expert in molecular biology and genetics, with a Double First in Natural Sciences from Queens' College, Cambridge and a PhD in cancer research. I also trained and worked as an actress and singer, and I now combine my skills as a science communicator, broadcaster, author, educator and trainer.

'I talk about science on the TV and radio, I give talks in schools, universities and at live events, I teach maths and science, I write books and articles about science, and I help others to communicate clearly about their work.

'I also campaign to increase diversity in science by encouraging more young people, especially girls, to choose careers in science. I am passionate about changing the perception of what it is to be a scientist and raising awareness as to the value of emotions in science and society. I enjoy sharing my own challenges and experiences as a woman in STEM in a way that might support and inspire others to reach their potential and attain their goals. I hope that I can be a role-model to young women.



'I love bringing simplicity and clarity to others – that light-bulb moment when it all makes sense. I think of myself as a translator, a bridge between the scientific community and the public.'

Karen Gracie-Langrick, Leighton Park's Academic Deputy Head, praised the talk as 'a fascinating insight into recent developments in science, in particular biotechnology and transformative medicine. It was a very accessible presentation and left us all with a sense of awe, wondering what will be possible in the future. Emily is a strong female ambassador for women in science and a real inspiration to all the students who heard her speak.'

Sponsored by Cisco, the lecture offered a light-hearted but insightful overview of pioneering biotechnology under the humorous heading, 'How to Build a Human.' Hema Marshall, Executive Lead for Inclusion and Diversity at Cisco UKI, said, 'Dr Grossman's lecture was a fabulous start to this annual series. Emily is a wonderful and engaging STEM role model and the excitement of the students was great to see. I especially enjoyed the section on stem cells and how we could potentially re-grow our own body. Cisco is delighted to support this initiative as part of our broader commitment to encourage girls and boys to consider STEM careers.'

The STEAM Careers Fair is designed to offer insights into professions from across the Science, Technology, Engineering, Arts and Maths (STEAM) industries. Visitors from Year 10 to the Upper Sixth at Leighton Park School, together with around





100 visiting students from The Abbey, Waingels, Emmbrook and St Joseph's College, explored their opportunities through a series of workshops and seminars. Some of the UK's best known STEAM organisations offered guidance and advice, including representatives from Unilever, Cisco, Pfizer Pharmaceuticals and Costain. Academic partners, such as the Universities of Southampton and Reading, and apprenticeship advisors, such as Ask Apprenticeships, provided information and support on the various routes into STEAM related careers. Browsing the stalls, students had the opportunity to ask plenty of questions as they researched their options for the future.

Sami Kanza, Research Fellow at the University of Southampton, returned to the Park as an Old Leightonian, one of several who were keen to give back to the community that supported them through secondary education. Embracing the Quaker testimony of sustainability, Sami has found a niche that enables her to marry her values with her skillset. 'My first degree was in Computer Science, but I do so much more than that now! I have teamed up with a Research Group led



by Chemist, Dr Jeremy Frey, and I'm involved in projects as different as maximising crop yield for African farmers and developing ways to improve health and safety within scientific labs. It's all about using technology to make a difference.' Dr Frey made the point that 'it is as much an attitude as anything else. Start where your interest is for your first degree, and then consider what people and technology can achieve together. Use your knowledge in a broader way. Where you start does not have to be where you end up; it's about using the skills you learn on the way.'

Miguel Calvo, another Old Leightonian, now at LINX Print, a sizeable commercial print company, agreed. 'I work with a team of chemists, even though you might think that within manufacturing it should be a team of engineers. We do have engineers, but we also need to develop ink that dries instantly and is perfectly adhesive without being sticky enough to come off on the consumer or to stick the products together on the manufacturing line. We were the first company to develop our own touch screen controls for industrial printing equipment. That's software engineering that we've pioneered even though we are printers, and we now provide tech support for our clients too. There are a huge number of STEM roles within STEM businesses that are not the obvious ones. I hope to inspire students to consider more of the options today.'

The careers event is one of a series of STEAM initiatives launched in 2017 by Leighton Park School, masterminded in conjunction with seasoned organisers and promoters of the 'Big Bang' brand, STEM Sussex. 'Big Bang Interactive', which takes place annually at Leighton Park School in March, was the first event of its kind to take place in Berkshire. Both of the Big Bang events contribute to the school's bid to achieve official recognition as a Centre of STEM Excellence. Next year's Big Bang Careers Fair will be on Monday 1st July 2019.

Leighton Park School is a co-educational Quaker school founded in 1890, based on the seven principles of respect, integrity, simplicity, equality, peace, truth and sustainability





Parental choice

Hugh Wright looks back to his Methodist boarding education

Old men dream dreams and young men see visions, or so the Bible tells us. This old man has been musing about how and why parents choose a school for their sons and daughters. All those involved in teaching will have observed this process throughout their careers, whilst members of staff who are parents will have made such decisions themselves. They are important ones, not only for the parents and their children, but also for the schools and for wider society. Independent or state, single sex or co-ed, selective or non-selective, day or boarding, near or far? Not all choices are available, but decisions have to be made.

It is only in recent years that I have begun to see how extraordinary the way my parents decided for me must now seem, but the underlying principle remains the same – what can we do for the best? No matter what else, that is what decides it. In my father's case, it was simple but costly. I was entered at birth for his old school, Kingswood, a single sex boarding school whose geographical location was not an issue for a good many of the parents who chose it. For, like them, my father was a Methodist minister and, since the days of John Wesley, the founder of the school, the Methodist Church had offered considerable help with the fees for its ministers' sons. This was only fair, as Wesley kept moving his ministers around the country to wherever they were needed, a system that persisted in some form until at least the 1960s, and I was to be the fourth generation of my family to benefit from this provision. That seemed to be that, provided I passed the exam to get in. There was no preparation for this in my Primary School, so I sat it in the house of a friend of my parents. We none of us visited the

school, which of course my father knew well but my mother had never even seen.

And that remained the case even when I joined the school at the age of ten, since the junior boys had been relocated from Bath to rural Berkshire on safety grounds at the start of the war. Prior's Court is a beautiful Queen Anne house near Newbury and I can still vividly remember cheerfully waving my mother goodbye from a second-floor window as she chose to slip away. We had been given a lift there by the parents of a fellow pupil, a family living in relatively nearby Chesterfield and who had a car. We got to Chesterfield by bus, quite a long ride from the small mining village where we lived. After that first time, the journey to school, made with two others from the age of ten, seemed to us to be an adventure joyfully repeated six times a year at the beginning and end of each term. After my bus journey to Chesterfield, there was a train to Birmingham Snow Hill, and then a change of stations, carrying our cases on foot to New Street. We changed trains again at Didcot, and finally took a bus to the school, into the Berkshire countryside. But what can my mother have been thinking as she left me there the first time? She was not able to visit the school again until the last Speech Day and my father never did. Travel cost money that they just did not have and most parents there were the same, which made it seem quite normal. We loved it, she bore it.

The same pattern was repeated when I changed to the senior school in Bath, and neither of my parents ever went there until the final Speech Day, when a very special effort was made. The only time my mother ever saw the school was as I



Kingswood today

Look around

was leaving, nor do I recall either of my parents ever making any comment about my school reports. The choice of subjects I studied at school, the university I would aim for at the end of my school career, the sports and extracurricular activities in which I was immersed, all these decisions were delegated to the school, mostly to a Housemaster they met only once. Just before Christmas 1956, a letter came to our home from Oxford saying I had a place and, later that holiday, an award. My father left the room quickly without a word when I showed it to him, to hide his tears of joy. It still moves me to think what that moment must have meant to them. Mother kept on knitting. But despite what now seems to me their extraordinary silence, I knew and I always had known that they cared desperately about it. They had made their choice about my education and they stuck to it through thick and thin. And thin was often very thin.

The vast majority of children in this country do not go to boarding schools, but that does not mean they do not travel, since parents hoping to send their children to the school they think will be best for them may look quite far afield. This has a significant effect on traffic flow since they often take their children by car because the school is not within walking distance or on a convenient bus route. When we lived on the Bristol Road into Birmingham in the 1990s, there were generally three levels of traffic flow in the mornings: one when the school, university and city traffic were all on the road; one when the university was not in full term; and one when the schools were on holiday – and that was the one that made the biggest difference. School buses or commuter rail services can only do so much, which is a pity because any young person prefers independence, not least in travel. It helps them own the

choice of school if they get there under their own steam, but for many that is impossible in the current schooling system. And even when children can travel to school on their own, parents still have cause to worry. Roads are challenging places at school run time, especially for pedestrians and cyclists, but that pales into insignificance compared with conditions in countries where law and order are under threat. I learned from the head of a newly formed independent school in Russia as Communism was falling that security, followed by a long school day, were the most important factors in parental choice.

My parents' choice and what it meant for them was made at a different time and in a very different society. The status of many institutions has diminished and they are now more accountable and trusted less. The choice my parents made may seem rather stark now, not least because physical comforts clearly played no part in their thinking, either for themselves or me. They trusted the school and shared its guiding principles and values, and they believed, rightly, that it gave me the best chance of an academic education.

I have always assumed they did not regret their decision, but they never said and now it is too late to ask them. Perhaps there is something in the fact that we sent our three sons to the school, making a fifth generation, a choice which worked well for us all.

Hugh Wright was Head Master of Stockport Grammar School (qv) from 1979 to 1985, Gresham's School, Holt, from 1985 to 1991, and Chief Master of King Edward's School, Birmingham from 1991 to 1998. He was Chairman of the Headmasters' Conference in 1995.

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

Drone design impresses judges

Drones designed by young scientists from Burgess Hill Girls were overall runners-up in an international competition organised by the British International Education Association and STEM Sussex, which supports and encourages young people to enjoy science, technology, engineering and maths.

The challenge for students was to create an international rescue drone that could respond to a potential disaster situation of their choice. The Burgess Hill Girls winning team, led by Georgina Wrigg and Alice Gibson, aged 13, focused on the 2004 Tsunami in the Indian Ocean, which claimed 225,000 lives across a dozen countries.

Their drone used thermal, infra-red and photographic cameras to scan the affected area looking for survivors and was able to release a beacon-assisted medical kit via a parachute.

The cameras could link to computers at the operating base to show live action videos of what the cameras were seeing. These could be recorded and pictures taken through the computers. The beacon attached to the medical kit meant a potential casualty could send a distress call and be rescued while using the medical supplies provided in the kit.

At the final judging, Georgina and Alice were presented with their prize, a Fii 200 drone, and a trophy.

Georgina said: 'It was an amazing surprise and I will definitely be doing more STEM research in the future! I hope that the school having a drone will help students better understand and remember the fascinating topics they will study.'



UKiset gets schools and international students off to a flying start



Alastair Montgomery describes UKiset's recent up-grade and seeks schools to trial the Thinking Skills Assessment at 16+

Thirteen thousand new international students will start in British independent schools this September. Essential to their success at their new school is their English language ability, and it is a huge benefit to have a good understanding of their abilities before they get started. Leading independent schools have been using UKiset to assess international applicants to British schools for the last four years. The UKiset model consists of a standardised reasoning test and a comprehensive English assessment in reading, listening and writing. The reasoning tests provide an impartial view on how an international student will cope with the academic rigour of a particular school. The results dovetail nicely with any internal baseline testing the school is already using. Due to increased demand for a greater insight into the English skills, UKiset has recently upgraded their English assessment in partnership with Cambridge Assessment.

We have been looking forward to improving our English skills test for some time and we are delighted to be able to roll it out before the busy season takes off for early bird applications for sought-after places in September 2019.

The English assessment will continue to provide schools with a language score on the Common European Framework for Languages (CEFR) from A1 to C1 or above. However, the new test provides two further pieces of valuable information. Firstly, a score on the standardised Cambridge English scale allows schools to see exactly how the ability compares to other assessments such as IELTS, and how close the candidate is to the next CEFR level. Secondly, the new results isolate reading ability and listening ability, providing a separate CEFR level and a scaled score for each skill. This extra level of accuracy is achieved using a computer-based online test that is only 15 minutes longer than the previous UKiset English test.

The UKiset results reports will look slightly different. The new English section will include separate scores for reading and listening, plus an overall average. It will include a copy of the Cambridge English scale and equivalent competencies in other tests. As a result, schools using UKiset will have a much better idea of an applicant's English level and more information to share with their English language support teams from the outset. The new scaled scores will help differentiate those higher-level candidates, providing further insight into the candidate's readiness to study in the UK.

UKiset is working closely with the admissions testing team at Cambridge Assessment to help schools identify the most suitable students. With an increasing number of international students using British schools as a gateway to the top universities, Cambridge Assessment and UKiset are looking for schools willing to trial the Thinking Skills Assessment (TSA) at 16+ entry. TSA was developed for a number of top university courses at Oxford and Cambridge to assess critical thinking skills essential to studying at the highest level. It is a great opportunity for schools to measure these skills and identify these potential applicants. Paul Crump, Assessment Group

UKiset and TSA are looking ever-increasingly at the underlying skills that determine a student's academic success.

Manager at Cambridge Assessment Admissions Testing says 'TSA assesses the higher-order skills of critical thinking and problem solving, widely recognised as important twentieth-century skills and shown to be good predictors of success in a range of academic disciplines. It allows applicants from a wide range of educational backgrounds to demonstrate their potential, regardless of prior knowledge, and provides a common benchmark of the core skills required to thrive academically, both in years 12 and 13 and in higher education beyond.'

UKiset and TSA are looking ever-increasingly at the underlying skills that determine a student's academic success. Admissions teams have new and improved ways of identifying the most suitable international students for their schools and colleges, using sophisticated measures. Using the right assessment to ensure a student can enter the British education system and hit the ground running is an essential part of the job.

If you are interested in learning more about these tests and this collaboration contact alastair.montgomery@ukiset.com. Alastair Montgomery is the Director of UKiset



Casting the net for future stars

Caroline Ritchie-Morgan is shooting for success on court

Netball is a sport that has never featured at the Olympics, but thanks to the success of the Women's Super League and a triumph for England at this year's Commonwealth games, netball is on the rise. The England team has just moved up to second in the world rankings for the first time, sparking a huge surge in its popularity. The number of players looking for a new club has already risen by two thousand per cent since the Roses won gold. As gold fever sparks a soaring number of youngsters signing up for netball, a leading independent school is spearheading the hunt to find the next generation of national players.

Wrekin College has been named as one of the new academy schools for the netball Super League which has helped to spark a resurgence in the game. The school has invested heavily in its

netball department, with an award-winning coach on the staff given full backing to search the UK for talented players, with boarding scholarships on offer.

Caroline Ritchie-Morgan, a former Welsh Under 19 coach and former assistant coach to the senior Welsh squad, now head of girls' games at Wrekin, is stepping up her efforts to find and coach the best players. 'Netball has been a great game for me in terms of developing who I am and how much I have gained in life, including lifelong friends, and I can certainly see why it would be popular. It's a great game to play.' The numbers speak for themselves: there was a 44% increase in participation at grass roots level in the last year, with nearly 30,000 players pounding the courts across England.



'Netball at Wrekin has been strong for some time,' said Caroline, 'but now we really want to capitalise on this surge in popularity by making sure that we are reaching all those players who have potential, so that we can help them access the best in coaching and support and take their sport to the higher level.'

Wrekin College has enjoyed significant success on the netball court for some time and has won numerous titles, with school teams regularly qualifying for the Regional and National Netball Finals. In 2018, the College was one of only four schools in the country to have two teams qualifying for the national finals.

One city where netball is thriving is Birmingham, which is also the closest major city to Wrekin College. Having two Super League sides within thirty miles, current league champions Wasps, based in Coventry, and Severn Stars, based in Worcester, has helped dramatically with raising the profile of netball in the city.

Now Caroline is on a mission to continue to promote the game and help youngsters with potential to access top level coaching. Caroline, who was named Netball Teacher of the Year by England Netball, is convinced that a new partnership with Severn Stars Nova Academy is really exciting news for the school.

'We have worked hard to produce top results at Wrekin College over the years and have had some wonderfully tight-knit groups who have come together in our netball teams. This is paying off in terms of recognition of what we are doing here and how we can contribute when it comes to encouraging top players as they are starting out on their careers. Now we want to expand that significantly and search out players competing for school teams, community teams and even county teams, who want to make the most of a comprehensive programme of coaching and training that can be combined with their academic studies. In a boarding setting, coaches are more readily available and can also take our netball players to more advanced training sessions with successful national teams.'

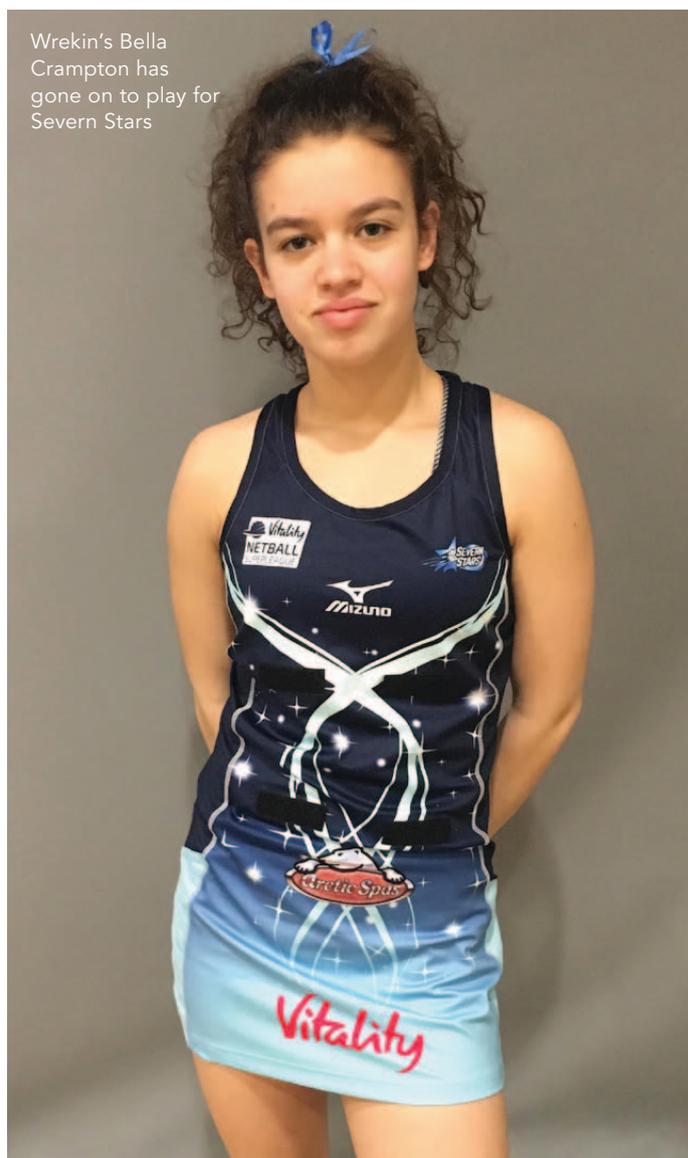
As one of the Severn Stars Super League franchise schools, the provision of regular high-level performance training can be extended to the next generation of potential netball stars at Wrekin College. The next step for players as they move on from County Academies on the England Netball Performance Pathway, is to the Nova Academies. Wrekin College has already discovered and offered scholarships to players competing at national level and representing their country.

Macey Lane, who has played for the U-19 Welsh team and taken part in trials for the U-21s, won a boarding scholarship to the school a year ago after Caroline spotted her playing in South Wales. Macey, who plays for Wasps as well as Wrekin College, believes it has been invaluable for her to be able to study at a school which offers her so much support in her sporting endeavours around the clock.

'I have a team around me here who really have been the greatest support, and teachers who have been wonderful in helping me to juggle everything. As a result, I have been able to push forward in netball and really go for it, but also feel that I am keeping up with my studies,' said Macey. 'Access to teams like Severn Stars and Wasps is an added bonus here at Wrekin College and I do believe schools have a significant role to play in helping to bring on sporting stars of the future.'

Former Wrekin pupils have represented England at U-19 level, with several also playing for Super League teams and

Wrekin's Bella Crampton has gone on to play for Severn Stars



winning places in the national talent squad and West Midlands development league.

Headmaster Tim Firth believes that encouraging sport in this way also boosts a pupil's performance in the classroom. 'We have seen direct correlation between success in the sports field and academic improvement. Confidence and feeling good at something does mean you feel more willing to take on more in other areas of your life, including your studies. Wrekin enjoys an enviable reputation for pastoral care and helping pupils to manage the different areas of their lives. We use that connection with them and the sense of security they gain allows them to push on further. It works really well.'

Caroline Ritchie-Morgan is Head of Girls' games at Wrekin College

Severn Stars Nova Academy will be holding trial days for the 2018/19 Under 17 teams at Wrekin College on 7th and 14th September.

Interested players can find more information on the trial dates at Severn Stars or Wrekin College websites. More information on the summer camps is also available at www.wrekincollege.com

GSA Girls Go Gold Conferences, September 2018

Elite women's sports teams from the UK are reaching ever greater heights in world sport. From well-established competitors in, for instance, Rowing, to the stunning recent successes in Olympic Hockey and Commonwealth Games Netball, girls are being inspired by the consistent achievement of the home nations in all sorts of sports. Essential to this is the way sport is regarded in schools and the provision of opportunities for participation at every level. GSA has taken a lead in this with its Girls Go Gold events, the first of which took place at Lady Eleanor Holles School in 2010. This year's Conferences are hosted by Bolton School and Tudor Hall School. John Newbould gives an idea of the enthusiasm building for the Bolton event.

Bolton School will host the prestigious Girls Go Gold Conference on Thursday 13th September, an annual event organised in conjunction with the Girls' School Association (GSA), which attracts hundreds of elite sportswomen in Years 10-13 who represent their county or country in their chosen sport, as well as those girls studying GCSE and A Level PE in GSA schools.

In what promises to be a motivating and thought-provoking day, there will be two keynote speakers: Sam Quek MBE, England hockey Gold medallist at the 2016 Rio Olympics, and 3000m and 5000m Olympic athlete, Eilish McColgan.

The overarching theme for the day will be 'Where Sport Can Take You', and a variety of speakers and workshops will illustrate the many career paths in sport. University staff will run four practical sessions on sports and biomechanics testing, sports intervention, sports rehabilitation and physiotherapy. Manchester Thunder youth coaches Phil Owen and Suzanne Bass will lead a netball masterclass, and Dr Lindsay Hill will lead a podiatry session. Victoria Screaton, BBC Sport Producer, will talk about TV sports production and BBC Sports Presenter John Watson will lecture on sports journalism and TV presenting. Sports Departments from a large number of Universities will be in attendance, including Loughborough, Liverpool John Moores, Chester, Bolton, UCLAN, Liverpool Hope and Edge Hill. Girls will have the opportunity to learn about overseas sports placements as an alternative pathway, to develop both academic and sports scholarship opportunities in the USA through Sporting Chance USA.

Headmistress of the Girls' Division at Bolton School, Miss Sue Hincks, said: 'We are very excited to host, once again, the renowned Girls Go Gold Conference. We look forward to welcoming a wide range of speakers who will inspire the young elite sportswomen from across the region. The aim of the day will be to motivate girls to believe that anything is possible with



Sam Quek



Eilish McColgan



Past speakers at GGG have included hockey star Alex Danson (2016) and heptathlete Katarina Johnson-Thompson (2015)

lots of hard work and the right mental attitude to develop their talent.'

The second GSA Girls Go Gold Conference will be held the next day, Friday 14th September, at Tudor Hall School in Oxfordshire, with key note speakers James Shone, founder of the charity, 'I Can and I Am'; Gail Emms MBE, Badminton Silver Medallist 2004 Olympics; and Clare Balding OBE, BAFTA Special Award and RTS Presenter of the Year Award.

As well as attending the keynote speeches, each delegate will have a practical functional movement session where they will be screened and given their own tailored programme to help focus on areas specific to their own body. To cap it all, the delegates will participate in a practical workshop with one of the following great athletes: Laura Merrifield, Co-Captain England Lacrosse, gold medal European Championships 2012; Becky Middleton and Zoe Shipperley, GB hockey players; Tamsin Greenway, England Netball International; Harriet Millar-Mills, England Rugby international; and Aimee Fuller, Olympic Snowboarder, Team GB.

Stuart Armstrong, Head of Coaching at Sport England, will be hosting workshops for accompanying teaching staff about looking at the whole, rounded individual and how too much specialisation at an early age can be counter-productive.

At lunchtime Sports Fair, there will be stalls from universities, sporting bodies, sports-related brands, competitive games and an opportunity to wind down thanks to our massage therapists.

The event will conclude with a Q and A session with all our athletes hosted by Clare Balding.





Innovation and inspiration for Strathallan pipers

Heather Dewar reports on a piping patent and a Barbados massed band



Robbie MacIsaac, a Sixth Form student at Strathallan School, took the Technology, Design and Innovation Challenge title with his innovative Flux Blowpipe in a national competition run by the Manufacturing Technologies Association (MTA). Keen piper Robbie created the blowpipe after many years of dealing with moisture in his bagpipes. He has now had the product patented and will look to get it manufactured as soon as possible.

‘I’m absolutely delighted to win the final of the TDI Challenge. To be up against such strong competition from schools across the UK was a fantastic experience, and to take the title is just incredible. I worked really hard in the design of the blowpipe, which came about from a natural desire to solve a problem I was dealing with on a daily basis. I’m a really keen bagpiper, and the product, which I had printed in 3D, works perfectly as a solution to moisture build-up. The sound is exactly the same – so I’m really happy with it.

I’ve had the opportunity to meet some amazing people at the final, whom I fully intend to stay in touch with as I look to start a career. Being at the Mazak Headquarters for the event has been really inspiring, too. The world of innovation and design is incredibly exciting right now. It’s changing all the time. Solving problems and coming up with viable solutions

is something I’ve really enjoyed in my time at Strathallan, and it’s great to meet people in the industry who are really driving things forward. I hope to now get my product manufactured, and we’ll see how it goes from there. I’m looking forward to beginning the process.’

The TDI Challenge, which took place on 4th July at Yamakazi Mazak’s European Headquarters in Worcester, saw an increased number of entries from across the UK this year, with a select few invited to Mazak to contest the final. Hundreds of students from across the UK submitted their GCSE, A-Level or BTEC Design and Technology Course Work projects to be judged by a panel of experts from the industry. The judges said that MacIsaac’s project was ‘well researched and a great use of materials. This product has a large potential market and Robbie’s presentation demonstrated the potential of his product.’

James Selka, CEO of the MTA, said ‘The TDI Challenge is one of my favourite days in the MTA events calendar. It is inspiring for us as organisers and judges to see the amount of talent we have in UK Schools. We hope that every single entrant in the competition found it worthwhile and left Mazak feeling inspired to pursue an engineering-based career path.’

Head of the Design and Technology Department at Strathallan, Craig Wiles, said, 'I'm totally delighted for Robbie. He's a hard-working pupil and deserves every success. The product he has created is just fantastic. It has brilliant commercial viability. He used augmented reality as part of his presentation to the judges and that was excellent to see. The TDI Challenge is the leading competition for Design and Technology in Schools across the UK, and to win is recognition of the hard work, entrepreneurial spirit and innovation that both Robbie and the Design and Technology Department have put in.'

We can't wait to see how his product will do when it is manufactured. Robbie has a bright future ahead of him, and we look forward to creating more exciting works in the year ahead. We're all really proud of him.'

The school will receive £2000 of credit to spend with Technology Supplies Limited, and Design and Technology equipment for the classroom, as a result of Robbie's victory, whilst he is looking forward to some valuable work experience in the industry before his final year kicks off.

Meanwhile, piping has offered an exciting opportunity for musicians further down the school, as four young Strathallan pipers joined the massed pipe band at the internationally renowned Barbados Celtic Festival in May this year. Beyond the Festival, which celebrates the Celtic links between Scotland, Ireland, Wales, Nova Scotia, the Gallic regions in Europe and the island of Barbados, the four Third Form pupils conducted workshops and performed at schools on the Island.

It's a great opportunity for the pupils to expand their horizons and experience playing at a big event, as Strathallan Pipe Major, Craig Muirhead, comments. 'Piping abroad at a Festival like this is an experience the boys will never forget. They immersed themselves in the culture and came back more experienced. I

want them to see that with piping, you can go anywhere in the world, and people will get excited about seeing you perform. They enjoyed piping in the massed band, but having the opportunity to perform in schools was also fantastic. They gained a real benefit from being able to pass on their experience to other children.'

Muirhead, who regularly pipes for the Prince of Wales, is also an Assistant Housemaster at Strathallan, and a big believer in sharing experiences and skill sets. A passionate advocate of the positive power of piping, he believes that it can be of huge benefit to academic learning. 'The whole method of piping can help with academic learning. I have a great memory, because I studied piping. The discipline encourages you to learn and read music, gain presentation performance skills, grow confidence and strengthen fine motor skills, amongst many other benefits.'

Piping can be started at any age. 'At Strathallan, we teach pupils from nine years of age and upwards. We already have a core group of younger boys and girls playing in our band, and the numbers are growing. They just love it. It's possible to teach someone to play the bagpipes in twelve weeks – one term – if pupils put the work in. This fast-track learning is particularly good for Sixth Form pupils and International students who want to give it a go. Once you've mastered it, it's something that will never leave you and you can do it anywhere.'

On Craig Muirhead's advice, the pipers proudly wore their kilts at the event, but not the rest of the full ceremonial dress. 'I think their full uniform would have gone down well in Barbados but, with the heat in mind, we decided on kilts and polo-shirts!'

Heather Dewar is Communications Executive at Strathallan School, with wide media experience and is also co-founder of Edinburgh Mums app.





Learning how to distinguish fake from fact

Karthik Krishnan examines the challenges that learners face due to the growing epidemic of poor and unverified information on the Internet.

In 2017 'Fake News' was named by the publisher Collins as its word of the year, with its use rising by 365 percent.

A recent BBC survey, sent to 18 countries around the world, found that nearly eight in 10 people who responded said that they worried about what was fake and what was real on the Internet.

The sad fact of today is that if you want to share information virally with as many people as possible, simply ensure it is false. Researchers from the Massachusetts Institute of Technology found that false claims were 70 percent more likely to be shared on Twitter than those that were true.

While a lot of information on the Internet comes from credible sources, sadly a huge portion of it doesn't.

These are troubling statistics, but it is interesting to frame them in the context of the evolution of consumer preferences. The attributes consumers value continue to change more rapidly than ever before, reducing product lifecycles.

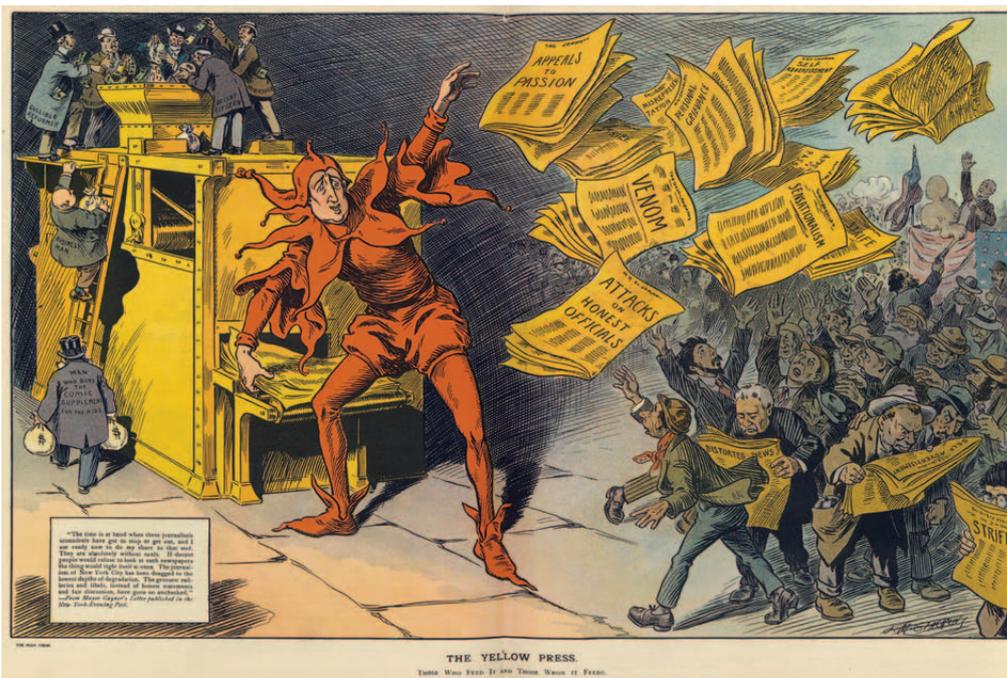
Take recorded music as an example. Vinyl records, that were a mainstay for decades, were replaced by cassettes because portability was the attribute consumers sought. When capacity and greater durability became more valued, CDs took over. MP3 devices cut short the CD run when consumers placed a higher emphasis on the number of songs that could be stored, even if it meant a drop in audio quality.

I grew up using Encyclopaedia Britannica books in the library. Perhaps you did, too. At the time, this big row of books was many people's central source of knowledge. Then came the Internet and, because of the ease of access this offered, people switched from using printed encyclopaedias to sourcing information online, following a similar evolution in consumer preferences. Unfortunately, current search engine algorithms are not yet advanced enough to differentiate between plausible and credible information. A number of people are taking advantage of this limitation, and their understanding of search algorithms, to get their own biased or unsubstantiated views to the top of the search engine results page.

So where does this leave teachers, who recognise the incredible value of the learning content on the Internet, but resist allowing children uncontrolled access due to the unreliable quality of the information? Finding credible information on the Internet has become an ordeal. In our busy lives we all, and especially children, tend to stick to the first few results on the search page and walk away with an 'answer', even if it may not be true. This puts the future of knowledge at risk.

The increasing abundance of fake information on the Internet is not going away, and we all want it to remain a valuable source of information. So how do we combat this dualism? In the same way as schools teach their students to

recognise online safety threats, the time has also come to teach them how to differentiate between trusted and fake information. For 250 years, Britannica has curated and provided trusted information to the world and helped knowledge evolution. While we stopped printing those hard copy encyclopedias in 2012, schools all over the world continue to access our trusted information online. The BBC's Newsround recently reported on experts from the University of Salford who believe that children from the age of 10 should have classes teaching them how to spot fake news on social media. Beth Hewitt, who was in charge of the project, told Newsround: 'Lots of children understand that fake news exists,



but can they really spot it when they see it in the real world? That's where lessons would help. This is important because if young people stop feeling they can believe the news is true, they could stop trusting the media at all....'

Paul Whiteman, General Secretary of the National Association of Head Teachers (NAHT) said: 'Children and young people need to learn... to stay safe in a digital world. This includes being able to evaluate what they find online and make decisions about whether it is reliable and accurate or if it is fake news.'

In terms of sourcing such learning material, Britannica offers resources that teachers can use to develop these vital skills:

'The five 'W's of website evaluation' is designed to give students the knowledge to identify legitimate, credible learning content (<https://britannicalearn.com/wp-content/uploads/2018/03/Five-Ws-of-Website-Evaluation.pdf>);

Our whitepaper series provides a step-by-step guide for students to help them evaluate online sources. (<https://britannicalearn.com/press/britannica-helps-teachers-impart-research-skills>);

Another recently launched option is the Britannica Insights Chrome (<https://chrome.google.com/webstore/detail/britannica-insights/hfipegnjbpgdlgifpdcfnjnhpckmbf?hl=en-US>) and Firefox (<https://addons.mozilla.org/en-US/firefox/addon/britannica-insights/>) browser extension – a free download that enables searchers to get trusted and verified information at the top-right corner of their search results page, and also offers a list of articles that relate to the searched topic.

The BBC also offers tips for spotting fake news, which can be found at <https://www.bbc.com/news/education-41902914> and America's National Public Radio lists sites it considers reliable places to check the veracity of what you read: (<https://www.npr.org/sections/ed/2017/10/31/559571970/learning-to-spot-fake-news-start-with-a-gut-check>)

Another source of learning content is FutureLearn, which provides a three-week course for teachers entitled 'Becoming a Digital Citizen: an Introduction to the Digital Society.'

In addition to these tools, the most important thing is to help students to strengthen their cognitive and critical thinking skills and build habits of mind to separate fact from fiction. Teachers, parents, librarians, publishers and technologists all have to play an active role if we are to stem the epidemic of knowledge dilution and ensure the evolution of knowledge and human progress. Even simple steps such as raising awareness; asking and encouraging your students to question the information they get from the Internet before moving on; providing a list of trusted sources on different topics; requesting them not to post or share anything on the Internet without vetting whether the information is valuable or not – any or all of these steps would make a big difference. Let us work together to maintain the significant benefits of the Internet and improve our critical thinking skills.

Karthik Krishnan is the global chief executive officer of the Encyclopaedia Britannica Group

HERE & THERE

Royal Hospital School triumphs in Field Gun competition

Students from The Royal Hospital School in Suffolk won one of the top trophies at the gruelling Royal Navy Junior Leaders Field Gun competition, facing teams from military units and further education colleges. The RHS team finished third overall in the competition held at Royal Navy base HMS Collingwood in Hampshire, but were the best team from a non-military establishment, returning home with the Endeavour Trophy for the fastest run by a non-military team.

The Junior Leaders Competition is held over the same course as the main Field Gun competition and requires the teams to haul a 1,250lb (567kg) field gun from one end of the course to another, stopping to fire two volleys along the way. There are obstacles and requirements along the way and it is all against the clock.

The Field Gun competition started at the beginning of the last century as a drill to reflect the action taken by a Naval unit in transporting field guns across country to lift the siege of Ladysmith during the Boer War in South Africa in 1899.

Former Royal Navy officer Nigel Griffiths, Head of Ceremonial at RHS and a former Field Gun Runner, who formed the Royal Hospital School Field Gun Crew just over three years ago was delighted.

'Every single person gave 100 per cent and I could not have asked for anything more. The RHS Field Gun Crew beat two other full time serving military crews, many colleges and universities, and we were the youngest crew to enter the competition. The crew should be very proud of this fantastic achievement. They have proven that the school's values of loyalty, commitment, courage, respect, service and integrity have underpinned this competition.'



If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

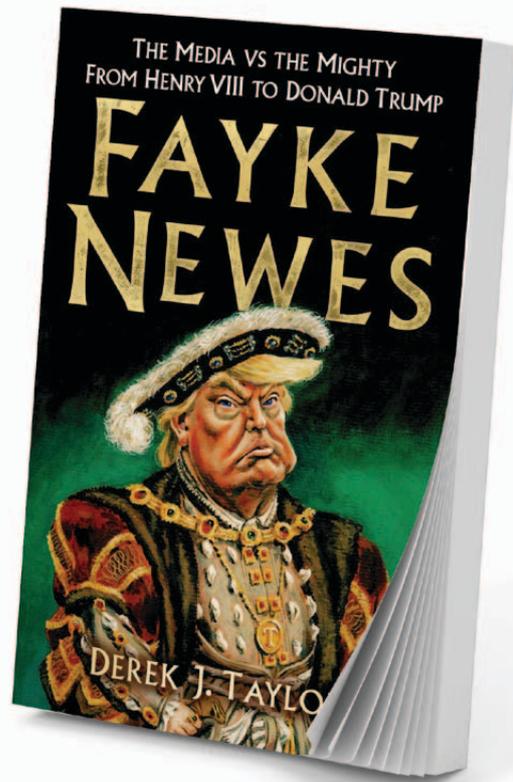
Look it up

Fayke Newes



Neil Boulton reviews....

The Media vs The Mighty from
Henry VIII to Donald Trump
Derek J Taylor
The History Press 2018
ISBN 978 0 7509 8778 3



As the title suggests, this is a book with a contemporary resonance. Derek Taylor's blurb says he studied law and history at Oxford, but the style and tone owe more to his career working as a correspondent for ITN, the BBC and as Chief Executive of Associated Press Television News. The story is related in the manner of an extended version of one of Jonathan Freedland's *The Long View* programmes, with a certain amount of heavy-handed authorial shepherding involved. There are no notes, but in the half page of Acknowledgements, the author reckons to have 'consulted close to a hundred books and academic papers' and cites Phillip Knightley's *The First Casualty* as worth singling out.

So it is no surprise that war is presented as the principal agent of change in this chronology. Vying with it comes technology, which allows Gutenberg primacy as an influencer, bookended by Twitter and Facebook.

The principal stages of development follow a route that takes it for granted that this is an Anglo-American journey. There are some other players who get a look-in, mainly Germans (inevitably A Hitler, a brief reference to Goebbels, and rather more on Princess Stephanie von Hohenlohe), but also a decent exposure of the impact of samizdat publishing in the Soviet Union. Overall though, the big players in this struggle write and speak English, or US English.

Initially the available media dealt in gossip, three headed beasts and suchlike. Civil war, on either side of the Atlantic in successive centuries, changed the terms and conditions somewhat. So too did the relentless acceleration of the speed of communication and the nature of the democratic process. In the pre-modern era, the heroic characters anticipate Private Eye – Marchamont Nedham, John Wilkes, Isaiah Thomas, James Gillray. The contemporary villains were often off the pace, having to react, though, as the pre-modern era leads to the State, the villains eventually managed to effect a degree of control.

A case study of the Suffragette movement and the media demonstrates that it was not necessarily a one-way street.

Ironically though, the Great War gave women the vote but also the Defence of the Realm Act. The latter, along with various Official Secrets Acts, tipped the balance in favour of the mighty. National security became something of a trump card for governments, even in the USA, despite constitutional safeguards for free speech.

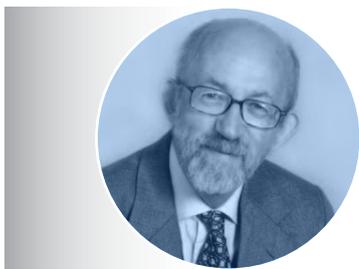
If government agents mainly wear black hats in this story, the media have some to offer as well. Rothermere's appeasement enthusiasm gets appropriate coverage, and there is mention of Maxwell. Interestingly Rupert Murdoch makes a single tangential appearance and thus does not emerge as any sort of villain. Alistair Campbell seems much worse. As correctives we have C.P. Scott of the Guardian, Woodward and Bernstein of the Washington Post – though maybe that should be Bradlee and Graham – and Geoffrey Cox of ITN.

Taylor becomes understandably enthused by the onset of television as a player. Vietnam created significant challenges to the relationship between the media and the mighty. But even here the tensions between news and national security stack up in the latter's favour. Watergate and the Dodgy Dossier might seem to have been the work of heroic reporters. But Woodward and Bernstein needed the FBI source and the Special Prosecutor to get a result, and Andrew Gilligan gets almost as much censure from the author as Alistair Campbell for their respective roles in the saga of WMD.

In the end, the Internet, essentially another product of military needs, hijacks the process, puts everyone on the back foot, and returns us to three headed beasts, gossip and alternative facts.

After what has been a quite light touch run through, Taylor concludes with some interesting suggestions about a way forward and the need for some ethics to re-enter, or perhaps enter, the equation. In sum, these amount to 'education, education, education'. But that didn't really end well either.

Neil Boulton read History at Oxford and was Director of Studies at Bryanston where he taught History, Economics and Politics.



Hide fox, and all after

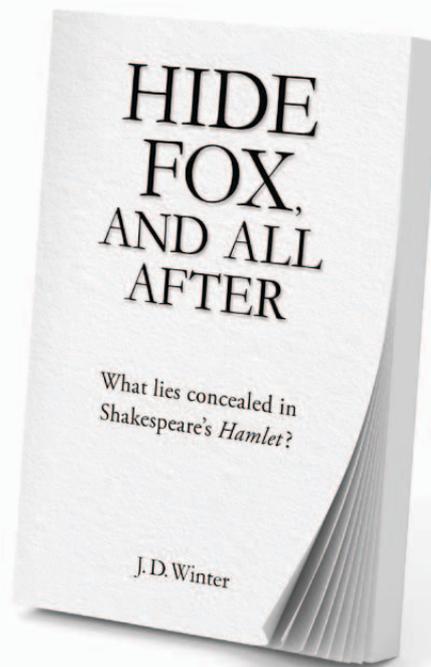
Joe Winter offers some reasons for yet another book on Hamlet

Listen carefully and you'll hear an army of wood-boring beetles. In every scholarly press, in every arts faculty, the *Hamlet* industry is on the march. Every year more books, more articles, more theories emerge. So why should I contribute to the crunching of dead wood and the rustle of dead pages? It's because for fifty years the play wouldn't leave me alone.

And so *'Hide Fox, and All After: What lies concealed in Shakespeare's Hamlet?'* has joined the pile, courtesy of Sussex Academic Press. But with a difference: no mention is made of any other literary work, by Shakespeare or anyone else, nor is there a single reference to any work of criticism. *The play's the thing says the prince, Wherein I'll catch the conscience of the king.* He is setting a trap for Claudius; but the first words may yet help the commentator avoid another trap. The play is the thing. Taken out of context the words can be a reminder of the primacy of the spectacle itself. A discussion is offered that seeks to operate to an extent as a spectator at a performance, observing what is in front of the nose, rather than the mass of comparative material or commentary below it. This is not to say that a student should not refer to the views of others. One must learn to be a scholar, to present different sides of an argument, to come to a balanced view. But one must also learn to see.

The book begins with the text of the play itself, with a good deal of cross-reference in the commentary that follows. Scene by scene, this seeks to bring the reader closer to the action, easier said than done with this classic of inertia. *For lo! his sword, / Which was declining on the milky head / Of reverend Priam, seem'd i'the air to stick. / So, as a painted tyrant, Pyrrhus stood, / And like a neutral to his will and matter / Did nothing.* The Player's recitation, started off by the prince himself, appears almost unnaturally to capture the latter's hesitancy as, mirrored in Pyrrhus, he sets out to avenge his father. We discover he is anything but inactive however. The inertia he is so conscious of conceals a deep-seated going forward. He needs to expose Claudius to the outward world as evil, not merely to kill him. Honour demands an outright and immediate revenge: but this is incompatible with a deeper need that on the surface he seems to know nothing of at all. Created magnificently out of such a dilemma, the play can be seen in part to be an exposition of the unconscious at work.

It is of course magnificent too in poetry. My edition of the Oxford Dictionary of Quotations has eight full pages devoted to *Hamlet* (Marlowe's entire oeuvre by contrast occupies one and a half). The inspiration of the words is included in that of the dramatic action, and the commentary seeks to bring the reader closer to this delight also. Again a phrase from the text is adopted, again out of context (this time with something of a wrench, the excuse being that it seems worth it). *O what a deed / As from the body of contraction plucks / The very soul, and sweet religion makes / A rhapsody of words.* The prince is furious with his mother for deserting the spirit of the marriage contract



sealed with his father. 'Rhapsody' there and then would have meant something like 'rambling poetic effusion', but with the slight shift in its current definition, the phrase is lifted as an alert to the commentator. Is not the cascade of poetry throughout an old-time drama in some respect 'a rhapsody of words'? It is not perhaps a scholarly appropriation but, in the narrow sense, this is not a scholarly book. One hopes it may be inspirational nonetheless.

Poetry should not be analysed to dullness. There is only so much one can say, in any event, on such an exclamation of Hamlet's as he advances upon Laertes who has leapt into Ophelia's grave. *What is he whose grief / Bears such an emphasis / whose phrase of sorrow / Conjures the wandering stars, and makes them stand / Like wonder-wounded hearers?* Yet merely to mention it may allow the student the mental space to marvel; and to compare the final phrase with the Priest's 'peace-parted souls' of a few lines earlier may encourage a sense of being able to glimpse the goings-on in the poetic engine, here in the making of a compound adjective. The use of the pentameter, key to so much of drama and poetry in English, is noticed here and there almost as a character of the text, dressed to the occasion in its pace and colour; and the extraordinary imagery throughout is taken note of and at times explored. In addition to the familiar motif of rot and corruption, the figures the poet finds for another theme are visited. The reader is brought within conscious earshot, so to speak, of a metaphorical by-play that surely possessed Shakespeare's mind as he wrote. The play is riddled with the thought-world of blind consequence.

Targets missed, the wrong target hit: again and again we are reminded of the innate capacity for human error. Hamlet's apology to Laertes just before the fencing-match is perhaps the

Look it up

most telling example, but the idea is much foreshadowed. *Sir, in this audience, / Let my disclaiming from a purpos'd evil / Free me so far in your most generous thoughts, / That I have shot mine arrow o'er the house / And hurt my brother.* And who is to say Laertes is not moved by these words, despite his cold fury, to the point that he is at last able to respond in kind? The ambiguity surrounding means and ends, the stuff of change itself, seems to create the play out of shadows: the text is chock-full of it. And all the time the audience itself is brought a little closer to the stage, as it were, led on by a recognition of the maze-like quality of any forward path that each of us knows only too well.

The book's title is a quip from the prince after he has accidentally killed Polonius and is summoned by the king. The chase is in progress almost throughout, yet at any moment one can never quite distinguish pursued from pursuer. Finally we are brought close up to what for so long has been just out of reach. The final phrase purloined from the text occurs in a typical lament of Hamlet's at his own shortcomings. *Witness this army of such mass and charge / Led by a delicate and tender prince, / Whose spirit with divine ambition puff'd / Makes mouths at the invisible event...* Seeing Fortinbras's army about to fight

the Poles over a *little patch of ground / That hath in it no profit but the name*, he lacerates himself for his own inaction. But those innocent words to describe the unknown future would not go away until I swept my desk free and had as clear a look at it all as I could manage. Is not the play charged with 'the invisible event'? Perhaps, after all, it is less about revenge and more simply to do with change itself, and the future that is always not quite upon us.

Teaching teenagers for almost all those fifty years – caught up, as at the sidelines, in their own tussle of change, with its moments of wild humour and its inevitable yet brave advancement through the mists – I hope I have been able to lay things out clearly enough for them to get to know this play well. And all-importantly, to have offered a commentary that insists on nothing, but merely takes them to where they may come to their own understanding of the greatest drama they will encounter, apart from that in which they play the principal part themselves.

Joe Winter is a teacher and poet who has also translated Bengali poetry and, notably, the works of Rabindranath Tagore and Jibanananda Das.

HERE & THERE

If you have news of topical interest, however brief, for 'Here and There', please email it to Tom Wheare at tom.wheare@gmail.com. Items should not exceed 150 words. Good colour photographs are also welcome.

Rendcomb 'Ground Force' for good

Sixth Form students from Rendcomb College spent a day at Stratton Church of England Primary School on Friday, 29 June, working on a 'Ground Force' project to clear and create a new outdoor learning area for the primary school's pupils.

Students in the Lower Sixth transformed an overgrown section of the school's site from unwieldy undergrowth into a new campsite area with seating, a small fire pit and a path through to the pond, lined with painted pebbles.

Headmistress of Stratton Primary, Ceris Towler, said: "I can't believe the transformation. It is so important to have links with schools like Rendcomb College who give so much back to the community. We are so thankful for all the effort put in by the pupils; they have done such an incredible job. The children cannot wait to use the area and are so excited to see their new campsite."

The project was managed by 17-year-old students Eve Harker and Tom Finch who led their team of Year 12s in designing the layout of the area and completing the various tasks throughout the day.

One group were tasked with sanding and painting the fencing at the front of the school, while another group cleared the overgrown area and prepared seats and decorations. Cutting back trees and bushes and moving large logs uncovered a huge amount of space for a campsite. Tom Finch, Deputy Head Boy and Project Manager said, 'Once we cut it all back we realised we had more space than originally thought so we used the logs we had removed from the area to create more seats for the pupils in a second seating section.'



Hereford Cathedral School: A History over 800 Years



David Warnes reviews...

Howard Tomlinson
Logaston Press 2018
ISBN 978 1 910839

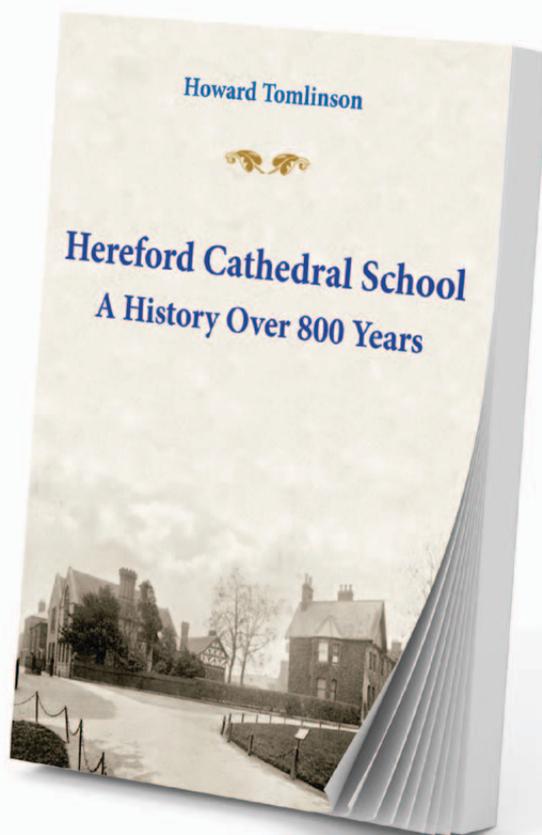
Knowing what matters

'We got through by the skin of our teeth ...' said Kenneth Clark of the period misleadingly known as the Dark Ages, whiggishly assuming that history had a purpose which included him. Hereford Cathedral School undoubtedly got through by the skin of its teeth, surviving the English Reformation, the Civil War, a succession of conservative Deans, and the collapse of the west end of the cathedral which damaged one of its buildings. These and other vicissitudes are described and analysed in Howard Tomlinson's excellent *Hereford Cathedral School: A History over 800 Years*.

The best school histories satisfy a range of users. Devoted former pupils expect reminiscences of those who taught them, team photographs in which they themselves feature and extensive coverage of their epoch. Historians of education hope the level of detail and analysis will make the book a valuable secondary source. The wider scholarly community look for a narrative supported by a strong sense of context; and the general reader welcomes an accessible style and plenty of amusing anecdotes. Tomlinson's book will please all of the above, steering as he does a deft course between what Robert Blake called 'the parish pump and the broad delta' of political, social and economic change.

Hereford's *alumni* are varied and interesting. Little is known about Thomas Traherne's time there. Godfrey Winn, one of the few journalists to have served with distinction both as an agony aunt and a war correspondent, and Kingsley Martin, who later edited the *New Statesman*, claimed to have been unhappy, while Peter Richardson captained the 1st XI in 1948 and made a century for England at Old Trafford eight years later.

The school is a mediaeval foundation and much older, as



Tomlinson shows, than its supposed origins in the 1380s. It flourished as a town grammar school under the auspices of the Chancellor of the cathedral, which was a secular rather than a monastic foundation. The English Reformation, which resulted in the closure of many schools, had at first little impact on Hereford. The cathedral clergy were slow to implement the Edwardian reforms and the first Elizabethan bishop, John Scory, described the majority of the canons as 'dissemblers and rank papists'.

Only in 1583 was a new set of Cathedral statutes published, which provided the school with its first endowment. The architect of this reform was John Whitgift, soon to be Archbishop of Canterbury. Bequests in the early 17th century strengthened the school's position. Hereford was besieged and captured during the Civil War, but the school survived, albeit under different management, and the cathedral hierarchy was re-established in 1660. Five years later the Dean and Chapter issued new orders for the school's governance. The schoolmaster and usher were charged to keep the pupils 'from that most wicked vice of swearing, the epidemical sin of this city.'

Hereford was one of a number of foundations which benefited in the late 17th century from the generosity of the Duchess of Somerset. The early 18th century saw only three headmasters in the course of 64 years, but it was not until 1778 that the school had the use, albeit not exclusively, of a purpose-built room which doubled as a concert venue. In 1794 the Dean and Chapter vetoed the holding of public entertainments there during Hereford races. 'In a time of dissipation,' they wrote, 'some place of restraint for keeping the young gentlemen within bounds, secure from danger, is particularly necessary.'



It was in 1837 that the school gained a permanent, purpose-built schoolroom in a convenient location. Under an Arnoldian Headmaster, John Woolley (1842-48), daily worship services and half-yearly examinations brought a new rigour and sense of purpose and, with the coming of the railway and the rise in the city's population, the school entered an era which Tomlinson characterizes as 'an age of restoration and improvement.' The Endowed Schools Commission reported in 1867 that Hereford Cathedral School was 'a good classical school.'

The foundation weathered the economic setbacks of the late Victorian era, acquiring many of the features of a public school, including compulsory organized games, a library and a magazine, *The Herefordian*. The curriculum was broadened, though, recalling the early 20th century, Kingsley Martin wrote that science lessons provided 'comic relief'.

Governance and finance are key themes of the book, and scholars will be pleased that Tomlinson explores these in detail, bringing to his analysis an understanding gained during his own time as Hereford's Head. From the Reformation to the 20th century much depended on the personality of the current

Dean. Conservative clerics blocked progress, whereas dynamic ones, such as the radical Whig Richard Dawes, in office from 1850-67, were forces for progress. From 1919 laymen (and later women) outnumbered clergy on the governing body, but it was not until 1983 that a lay person was appointed as Chair. In 1987 the school was incorporated as a company limited by guarantee, acquiring for the first time an externally validated system of corporate governance. The Dean is now President rather than Chair of Governors, and relations with the Cathedral are cordial.

In the past hundred years, Hereford Cathedral School has faced the same financial challenges as other independent schools, including wartime inflation, a decline in boarding numbers and the precariousness of the direct grant system, on which the school became increasingly dependent in the post-war era as its endowments were cashed in to pay for badly-needed new facilities. The phasing out of government support from 1976 onwards gave some breathing space, but a 50% increase in fees as the school became fully independent was unavoidable, with further adjustment needed when the Assisted Places scheme was finally abolished in 1997. Numbers in the senior school peaked in the mid-1990s, but overall numbers have remained steady in the years since the credit crunch, and the continuing and impressive development of the school's buildings and facilities is evidence of a combination of shrewd management and vision.

Girls were admitted to the sixth form in 1970 and at 11+ in 1973 and, in this respect, Hereford was well to the fore. The extra-curricular life of the school was broadened and reinvigorated, and an impressive number of buildings were modernised or constructed.

It is, however, the particulars and quirks of school life that will most interest the general reader. Whether it is the saga of the senior chorister who was tried for arson in 1820, the OH who described foreign teachers as 'a sort of providential arrangement for us to make sport of', or the dynamic headmaster, J.H. Crees (1920-40), who retired to the village of Much Birch, there is much to entertain and amuse. Some incidents might have found their way into the novels of one of the Trollopes, Anthony or Joanna. Underlying it all, however, as a serious and valuable ground bass, is the relationship with the cathedral, its music and the faith that music seeks to express. As an OH who joined the school in 1978 puts it:

'...we have the cathedral, the school and the green hills beyond...It's a beautiful and increasingly privileged perspective. We weren't served up doctrine, but [came]...away knowing what matters.'

David Warnes taught History at Ipswich School and has had a long association with C&CR as a member of the editorial board and contributor. He was ordained in 2005 and is now a priest in the Scottish Episcopal Church.

Underdogs, curses and 'Neymaresque' histrionics

The Cambridge University Press reveals the World Cup buzz words

Founded in 1534, the Cambridge University Press (CUP) is the oldest publishing house in the world. Perhaps appropriately, therefore, CUP has focused on English as it is spoken and written now and everywhere, with the special intention of making it a more accessible and better means of communication. The Cambridge English Corpus is a multi-billion word collection of written and spoken English. By studying the Corpus, our authors can see how English is really used, and identify typical learner mistakes. We no longer have to rely on intuition to know what people say or write: instead, we can see how English is actually used by a huge variety of different speakers. So, materials developed with our Corpus are more authentic and can illustrate language as it is really used.

Cambridge learner's dictionaries, grammar and vocabulary training materials, and examination, business and general English course books have all benefited from the information in the Cambridge English Corpus. The language is useful, natural and fully up-to-date, which helps students to avoid confusion or mistakes.

To celebrate this year's football World Cup, the CUP language research team conducted a global study that would collect the language used when discussing each team. Football fans around the world were asked to enter the three words they think best described a team of their choice on the Cambridge World Cup website. The Language Research team will now analyse them as part of a study into the language used when writing about the tournament. The public's contribution will form a 'People's Corpus', a collection of words which researchers can then compare to the 'Football Corpus', the words used by the media about the various teams.

The results of the research, including the top three words for each team, were revealed ahead of the final match on Sunday 15th July, and each time three words were added to the website, the Press would donate £1 to United Through Sport, a charity dedicated to transforming children's lives through the power of sport.

Laura Grimes, Senior ELT Research Manager at Cambridge University Press, explained why this campaign is so exciting. 'We'll be building on the research that we conducted during the 2014 World Cup, where we collected a whopping eight million words for the Cambridge Football Corpus. It's going to be really interesting to see how thoughts and views might have changed in the past four years. Will we, for example, still be talking



about Argentina's *flair*, the *inexperienced* English squad, or the *focused* Germans?

As an organisation, we already collect millions of words each year for our Cambridge English Corpus, which helps us to ensure we are using current and relevant English in all our English language teaching materials.

Teaming up with 'United Through Sport' is really the icing on the cake. They focus on working with children from disadvantaged backgrounds, using the power of sport to improve education, raise awareness and build life skills, so really, they are the perfect partner for this campaign.'

Participants from the 32 countries involved in the finals simply visited cambridge.org/word-cup, clicked on any country and entered the three words they felt best describe the team. Building on similar research conducted during the 2014 World Cup, the CUP has also mined over 12 million words of media coverage, to analyse the language used by journalists and media commentators when discussing the various teams over the course of this year's tournament.

There has been no shortage of surprises during this year's competition, and this clearly shines through in the language data. Expressions such as *premature exit* reflect that several of the predicted favourites haven't fared as well as expected, with the odd *unforgivable blunder* making an appearance, too.

Comparison with the language collected in 2014 shows that, whilst traditionally successful teams such as Brazil have gone from *stylish* to *nervous* and Argentina from having *flair* to *struggling*, World Cup 2018 *underdogs* England have gone from being *inexperienced* to *confident*.

The data reflects that several teams have defied expectations – the word *underdogs* features frequently in media reports,



www.gabbitas.com
+44 (0) 20 7734 0161 | info@gabbitas.com

Gabbitas Educational Consultants is registered in England No. 2920466, Part of The Shaw Trust Group. Image supplied by Eastbourne College.

More than the opportunity of a lifetime...



The opportunity to **improve lives**

Be the change

Be the voice

Open the door to **your** community success by making mental health and wellbeing a strategic priority this school year. It is time to put the 'i' back into boarding.

Unleash the power of your community by working towards the Mental Health Award for schools. One community project covering all school years and boarding community.

Join the Boarding Minds strategy days to share and build a better future for all. It is time to build a stronger future together.



Simply Boarding
Boarding Today. Building Tomorrow.

Contact us at
www.simplyboarding.com



along with related language like *plucky*, *determined*, and *punch above their weight*. The verb *overcome* is commonly found alongside words such as *obstacles*, *hurdles* and *adversity*. Even England's long-standing penalty curse has been overcome, whereas previous champions Germany fell victim to the *curse of the holders*.

The introduction of Video Assisted Referee (VAR) technology has seemingly been met with mixed feelings, as it is commonly associated with words such as *controversy*, *overturn* and *incident*.

Despite the introduction of VAR, however, bad behaviour still abounds. The word *histrionics* is prominent in the data,

often found alongside adjectives such as *ridiculous*, *headline-grabbing*, and *amateurish*. A new term has even been coined this year: *Neymaresque*.

Laura Grimes added, 'It's been great to see the correlation between the language used by the media and the descriptive words submitted by football fans. We've combined these two datasets to select the three words most strongly associated with each team. The huge amount of language data we've collected and analysed gives us fascinating insight into the mood surrounding the World Cup. It's been a dramatic and surprising tournament and this is certainly reflected by the language used in the media, as well as by football fans.'

THREE WORDS SAY IT ALL – BUZZWORDS BY NATION

Argentina Messi, scraped, struggled	Morocco fined, eliminated, upset
Australia head home, bow out, failed	Nigeria fail, struggle, kit
Belgium eased, star-studded, cruised	Panama pitiful, minnows, bully
Brazil favourite(s), nervous, expect	Peru struggle, missed, waste
Columbia dangerous, unsporting, struggled	Poland fail, suffer, concede
Costa Rica eliminated, suffered, Navas	Portugal thrilling, hat-trick, Ronaldo
Croatia dark horse, dominate, impress	Russia low-ranking, host, fans
Denmark penalty, propel, concede	Saudi Arabia happy, defeat, thrashing
Egypt happy, hope, lack	Senegal yellow cards, partying, stunned
England Southgate, confident, fresh	Serbia controversial, gesture, dominate
France formidable, dramatic, lucky	South Korea plucky, skill, hope
Germany upset, stunned, eliminated	Spain sack, frustrate, fail
Iceland debutants, surprise, newcomer	Sweden impressive, clinched, dominate
Iran underdog, ambitious, VAR	Switzerland battle, held, secure
Japan heartbroken, emotional, clean	Tunisia redeemed, failed, keeper
Mexico thumped, thrashed, stunned	Uruguay dangerous, success, defence



FUTURE-PROOFING > BRITAIN'S INDEPENDENT SCHOOLS

Priva UK, one of the world's leading building controls manufacturers, launches new initiative and publication.

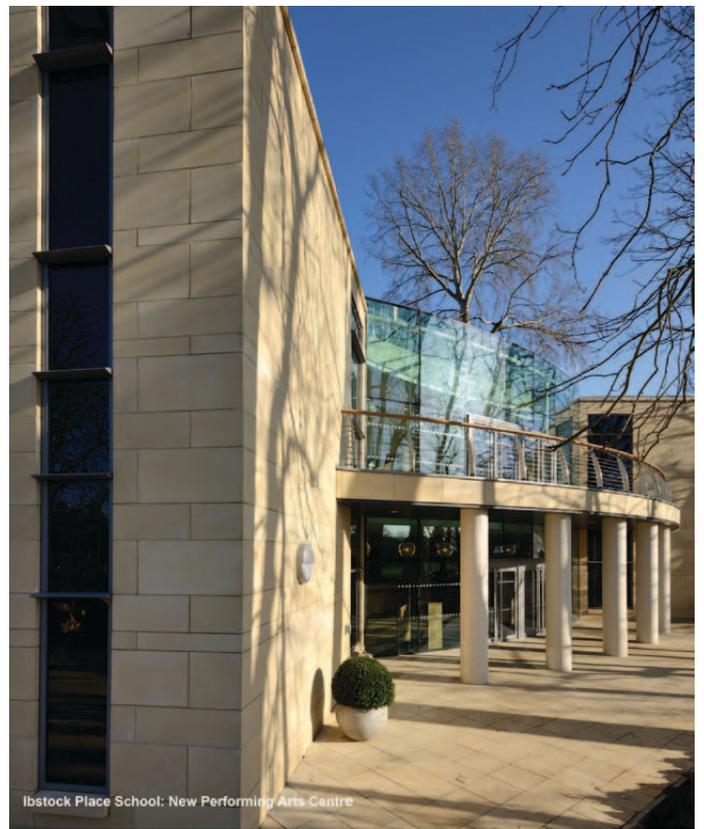
Future-proofing Britain's Independent Schools provides an overview of the outcomes and benefits of control technology. It explains in clear language how Priva's technology - in use at Marlborough College and Charterhouse School - is helping independent schools of all sizes take control of their energy use and deliver site-wide efficiencies.

Gavin Holvey, at Priva UK says:

"Our guide explains how control technology can improve building efficiency, reduce emissions and deliver energy savings of up to 40%, through greater control of heating, ventilating and air-conditioning services. All achieved while maintaining a comfortable learning and working environment for pupils, staff and visitors.

"Our controls solutions are proven to meet three essential characteristics: unobtrusive; non-disruptive; and flexible, which gives the independent schools' sector confidence in our technology for their historic and new buildings alike."

To request a free copy of Priva's Future-proofing Britain's Independent Schools book, please contact the UK Sales office on: T +44 (0)1923 813 480 or contact.priva@priva.co.uk



Ibstock Place School: New Performing Arts Centre



BHM Architects Design for Education

Whether you are masterplanning, considering a flagship project, or just moving the maintenance shed, enlist our vision, enthusiasm and unparalleled experience in design and construction for the education sector. Contact us at:

BHM, Unit P05, Old Power Station, 121 Mortlake High St, London SW14 8SN
T: +44 (0)20 8878 4667 E: info@bhmarchitects.com W: bhmarchitects.com



UNIQUE. INDEPENDENT. READABLE!



Reach the discerning parents who rely on our trusted, insider school reviews across 19 counties.

muddystiletto.co.uk/school-reviews

katie@muddystiletto.co.uk

SESSIONS FOR YOUR STUDENTS

BRINGING GUEST LECTURES AND TALKS DIRECT TO YOU



WORLD TOP
200

Times Higher Education World University Rankings 2018

UK TOP
15

The Times and Sunday Times Good University Guide 2018 and the Complete University Guide 2019

AWARDED
TEF Gold

in the Teaching Excellence Framework 2017

We can offer a range of talks and workshops for you and your students including:

- Personal Statements • UCAS • Student Finance
- How to choose a course and university • Student Life

If you have a group of students interested in a particular subject get in touch, UEA academics can visit your school to deliver a guest lecture.

Email schools@uea.ac.uk to find out more and book





Summer sets up September start

Jason Morrow chooses the Taste of Chicago over the experience of the boot camp

There is certainly no denying that the summer vacation in US schools is long as students typically have around 10 weeks off, and this presents many challenges at the start of the new year in terms of re-establishing good work habits and consolidating learning from the previous year. As in many other countries, the experience of students across the long, hot summer also varies greatly. Some are fortunate enough to spend much of the time travelling or attending 'sleep away camps' in idyllic settings, though I have to confess that I have seen a few too many horror movies not to hesitate a little at the prospect of a summer in cabins by Crystal Lake. For many, however, boredom and inadequate childcare are the dominant features of the summer vacation. New York runs a series of Summer Meals programs to try to ensure at least a nutritious breakfast or lunch as part of their 'No Kid Hungry' drive, and many charities, religious organizations and other volunteer bodies strive to provide safer and more structured or productive outlets for children. Sadly, there is often also a sharp increase in gang-related violence and activity during this period which they tend to view as prime recruiting season, and the authorities and civic bodies seem to be struggling to tackle this blight on the lives of so many children. There is undoubtedly a palpable sense of relief among stretched parents as the end of the vacation approaches and the 'Back to School' sales kick into high gear. One of the aspects of these campaigns which I particularly enjoy is their emphasis on the excitement, potential and opportunities the new school year presents, even if it is occasionally tinged, for a Head, with anxiety about the various not quite finished summer projects I know are still ongoing around the school.

The summer vacation experience for teachers also varies greatly. Some have to use the time to take on additional work to try to supplement salaries which remain stubbornly low and have increasingly resulted in strikes and teacher shortages in states such as Oklahoma and Mississippi, where experienced educators often barely make £30,000. Others help to run the many camps and summer schools across the country, driven by a combination of financial, career and personal passion motives. Many, of course, also make the most of the opportunity to travel, spend more time with family and friends or just to rest and recharge for the next year. Professional development and educational courses are, however, key features of the summer months for many teachers. US teachers are required to complete a number of certified courses or training each year to maintain their accreditation, and many of these are brilliantly designed to help teachers develop or refine their own practice or maintain an intellectual connection to their subject. I attended such a course in July, organised by the New York Historical Association and entitled 'Natives and

Newcomers'. Delivered by a professor at Columbia University, the course gave the thirty teachers in attendance a chance to examine important documents and artefacts relating to the early interactions between European settlers and the local Lenape peoples. Such training is a great way to help teachers engage with current research and gain fresh insights into the topics they are exploring with students. I was especially intrigued by being able to study one of the original Seventeenth Century deeds of exchange for Staten Island. The colonists had been trying in vain for decades to persuade/ pressure the local Munsee people to relinquish their rights to the land. The agreement ultimately reached in 1670 had four native youths signing on behalf of the Munsee, the youngest of them recorded as aged 5 and 6, as it was felt that this would help bind the next generation of the tribe to the agreement. High pressure land sales of dubious morality have clearly been part of New York for a very long time!

I do still sometimes struggle with the more extrovert aspects of the job and I certainly find it hard to draw on approaches such as 'unlocking your superhero' or 'leading like a pirate.'

Independent schools invest heavily in staff training, whether through financial aid towards studying for higher degrees, or helping to fund travel and research costs to enable teachers to develop and write new courses. Such opportunities can be hugely invigorating for staff and also act as a powerful demonstration of a school's real commitment to lifelong learning and staff development. This is an area we are seeking to strengthen, and one of the things I am excited to share with staff at the start of term is a new visiting teachers program we

Letter from America

are launching with an IB school in Sydney, which will give staff the chance to work on an agreed research project with a colleague from the partner school. The length of pre-term staff inset in the US also tends to be at least a week, which helps to create space for more substantial whole staff training and discussion on priorities or development areas for the coming year, as well as giving teachers the chance to collaborate with colleagues and prepare their classrooms and other learning spaces for the return of students after Labor Day. I cannot overstate how much less pressured this makes the start of the school year compared with the one or two day rush to fit in training, induction and essential updates that is still common in so many UK schools.

Summer is also conference season for many of the associations of school leaders across the US, and I once again attended the National Association of School Principals conference, which this year took place in Chicago. Two new features of the conference were short, thought-provoking Throwdowns on specific challenges or opportunities for school leaders, and informal Connectathon sessions around the theme of digital learning. The format of both these approaches worked well to generate discussion and highlight key ideas or issues, and I am keen to see if we can adapt them for use with staff and students back in school over the coming year. What I most appreciate about the conference, however, is that the focus of sessions is consistently on ways to improve student outcomes or to enable and support staff, but also on how to develop one's

own skills and understanding as a leader. My favourite session took the format of an all too familiar game in school leadership and offered suggestions on 'How to stop playing Whack a Mole and Achieve your Goals'. Another of the presentations I found very helpful, albeit a little uncomfortable at times, challenged us to ask ourselves the question 'Is your school better because you lead it?'

I do still sometimes struggle with the more extrovert aspects of the job and I certainly find it hard to draw on approaches such as 'unlocking your superhero' or 'leading like a pirate.' I also suspect that no one who knows me would struggle to guess where I ended up when given a choice between attending boot camp training sessions delivered by the US military to 'build your strength and resilience as a leader', or going to sample some of the delicious culinary options at the 'Taste of Chicago' celebration in the city. The quality and range of speakers at the conference was so impressive and it would be hard not to come away from the event inspired and rejuvenated, or at the very least with some valuable questions to ponder over the summer. Thankfully, one of the key recommendations in the session on 'What effective leaders do in the summer to ensure a successful year ahead' was take some time off, and that is next up in my calendar as I head off to Cape Cod for a break before staff return to prepare for the new year.

Jason Morrow is the Headmaster of the British International School of New York

CUTTING EDGE CPD

WITH WILL ORD



Bespoke INSETs on:

- Creating Great Learners
- Thinking & Communication Skills (P4C)
- Growth Mindsets
- Wellbeing & Mindfulness
- Parent & Governor Sessions

Will Ord is a very experienced education trainer with an international reputation. He has been a teacher, author, university lecturer, Chairperson of SAPERE, and writer for the tes. He has worked in education for 25 years, and with hundreds of independent schools (3-18) across the world.

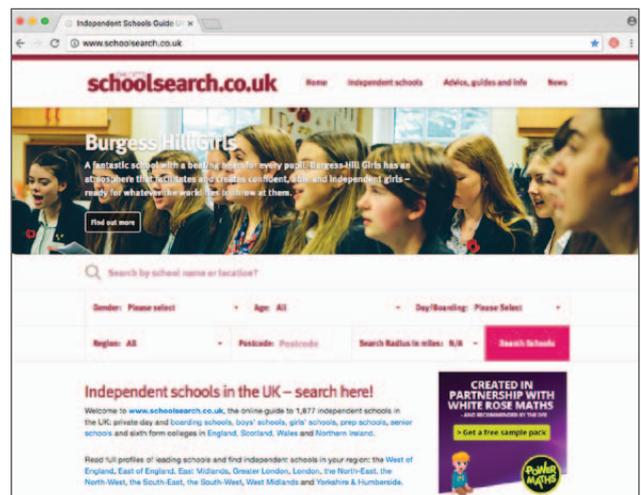
For more information:

www.thinkingeducation.co.uk

“Inspirational, research based, and really practical. Brilliant!”

How does your school compare?

Check out your listing on our online guide to UK independent schools: www.schoolsearch.co.uk



Tell the world about your school in up to 800 words, add images, Twitter feed and social media links, open days and video.

In association with John Catt's *Which School?* now in its 94th edition

Contact: enquiries@johncatt.com

Squadkit

Performance. Delivered.



PERFORMANCE SPORTSWEAR,
DELIVERED BY **SCHOOLBLAZER**

Designed exclusively for you
The #1 sportswear brand for independent schools
Simple one-stop online shop

Call 0333 7000 703 info@squadkit.com www.squadkit.com

schoolblazer
Quality, Innovation and Service. Guaranteed.

Quality garments with a market leading service



You'll know that Schoolblazer stands for quality and style. What you may not know is that we offer the most convenient service for parents, with free name taping, intelligent sizing technology, easy online ordering and super fast delivery.

It's no wonder we're now the UK's leading supplier of uniforms and sportswear to independent schools.



Over
95%

Customer satisfaction*



Over
98%

Orders shipped within 2 days.*
Name taped



Over
99%

Product availability*

Call 01832 280011 info@schoolblazer.com www.schoolblazer.com

(*Back to school data in 2016)

schoolblazer

Quality, Innovation and Service. Guaranteed.