# HIGHER EDUCATION bulletin

AUTUMN 2014

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# Autumn 2014 issue



# Welcome

**Welcome to the autumn issue of HE Bulletin.**
As students return to their studies we can reflect on a summer when the press speculation about students not achieving as highly as they have in the past proved not to be the case. The analysis of which subjects were taken reveals a continuing trend towards students taking facilitating subjects. A Level Maths takes over from English as the highest entry subject and A Level Chemistry moves up to the fifth most popular A Level. As the take up of STEM subjects continues to increase, it will be important to understand what this means for other subjects. OCR is keen to hear from universities about subject trends. Do you have concerns about particular subjects? This is of particular interest as Ofqual completes its consultations on qualification reform which will see a narrowing of the number of subjects which carry the title of GCSE or A Level. Pages 4-5 outline the latest on what is happening with qualification reform. One of the key issues that remains central for schools and colleges is the future of AS. On page 14, Paul Steer, OCR's Director of Policy and Strategy, sets out what he sees as the issues.

We continue our series on our new A Levels qualifications and on pages 6-7 we introduce new A Levels in Sociology and Psychology. These qualifications have been built in partnership with key stakeholders including colleagues from higher education and who sit on our subject consultative forums.

As entries to the Extended Project Qualification rise substantially, we introduce OCR's new subject specialist and would welcome opportunities to work with university colleagues on our development of this qualification.

UCAS figures produced recently show an increase in the number of students entering HE with vocational qualifications. On pages 8 and 9 we speak to one university about its involvement in the development of our vocational qualifications and its wider involvement with the university technical college movement, and on pages 10–11 we showcase our new Level 3 technical qualifications in engineering.

As always, we are keen to hear your views and opinions and we welcome your feedback.


**Sally Brown**

Email: **Sally.Brown@ocr.org.uk**
Telephone: 01223 558 329



Vocational qualifications

Telephone 024 76 851509
Facsimilie 024 76 851633
Email: vocational.qualifications@ocr.org.uk

General qualifications

Telephone 01223 553998
Facsimilie 01223 552627
Email: general.qualifications@ocr.org.uk



PART OF THE CAMBRIDGE ASSESSMENT GROUP

# News in brief

## Ten high achieving students from across the West Midlands have each been awarded bursaries from OCR towards their studies at the University of Cambridge.

Recipients of OCR bursaries receive £3,000 for each year of their undergraduate studies which can be used for living or tuition costs, or a combination of both. The award fund, arising from OCR's historical association with the West Midlands Exam Board, helps talented students in the region make the most of their studies at the University of Cambridge.

Having recently completed their A Levels at schools and colleges in Bartestree, Birmingham, Bridgnorth, Coventry, Kidderminster and Porthill, the students were each presented with their bursary awards at a ceremony at OCR in Coventry.

Students will be studying linguistics, engineering, economics, land economy, human, social & political science and medicine.

Liam Sammon, OCR's Director of Education and Commercial Services, congratulated the recipients: "Our 2014 bursary award winners have once again shown what


incredible talent there is within schools and colleges in the West Midlands and we are delighted to fund aspects of their undergraduate studies at the University of Cambridge. The OCR bursary scheme is in its 11th year and our ten winners richly deserve their prizes, each demonstrating extremely high academic achievement, even in the face of adversity and challenges. They can now progress to Cambridge without having to worry unduly about financial constraints".

## Subject Specialist – The Extended Project Qualification

Rebecca Wood has been appointed to a new post in OCR as subject specialist with the specific remit of working on the Extended Project Qualification (EPQ). OCR recognizes the importance of the EPQ and is keen to make sure it fits well with undergraduate study as well as understanding the potential skills it allows students to achieve which are also relevant to the workplace.

This year, the extended project was taken by 33,200 students, up 9% from 2013. Only eight A Level subjects were taken by more students, with the qualification proving more popular than established courses such as Sociology, Geography and Economics. The number of entries has increased six-fold since it was first taken in 2009 by just 5,100 sixth-formers.

Most commonly, it takes the form of a dissertation of 5,000-6,000 words, which could be structured as an academic essay or research report. Alternatively, students also have the option of creating an artefact, such as a piece of art or a computer game, or staging a production, which could take the form of a charity event, fashion show or sports event.

Rebecca is keen to meet up with interested colleagues who may be working with schools on the EPQ or looking at it from an admissions perspective. If anyone in your university is interested please contact Rebecca at **Rebecca.Wood@ocr.org.uk**

**Rebecca Wood**
*Subject Specialist, Extended Project Qualification*

## Core Maths

OCR has received accreditation for its new Core Maths qualifications, designed for students who achieve grade C or above in their GCSE Maths but do not wish to continue with any form of more advanced maths after age 16. We have designed two different Core Maths qualifications developed jointly by Mathematics in Education and Industry (MEI) and OCR: Level 3 Certificate in Quantitative Reasoning (MEI) and Level 3 Certificate in Qualitative Problem Solving (MEI).

| Quantitative Reasoning (MEI) | Quantitative Problem Solving (MEI) | Tariff Points |
|---|---|---|
| **Component 1** Introduction to Quantitative Reasoning | **Component 1** Introduction to Quantitative Reasoning | A – 60<br>B – 50<br>C – 40<br>D – 30<br>E – 20 |
| **Component 2** Critical Maths | **Component 2** Statistical Problem Solving | |

# Policy Update

## As consultations on reform to GCSE and A Level come to an end, we are now able to outline the timetable for change and the structure of the changes.

An overview of the subjects and structure of the new qualifications is given below:

### NEW GCSEs

**First Awards 2017**

- English Language
- English Literature
- Maths

**First Awards 2018**

- Ancient Languages
- Art & Design
- Citizenship
- Computer Science
- Cooking and Nutrition
- Dance
- Design and Technology
- Drama
- Geography
- History
- Modern Foreign Languages
- Music
- Physical Education
- Religious studies
- Science (Biology, Physics, Chemistry and Double Science)

**NEW QUALIFICATION STRUCTURES**

- Fully linear – assessment at end of course
- In principle, assessment by exam only
- Non-exam assessment only where necessary
- Graded 9 -1
- More rigorous
- Tiering used only where one assessment cannot assess students across full ability range
- Speaking skills assessed:

  English language **does not** contribute to grade

  Modern foreign languages **does** contribute to grade

### NEW A/AS LEVELS

**First Awards 2017**

- Art and Design
- Business
- Computer Science
- Economics
- English Literature, English Language and English Literature and Language
- History
- Science (Physics, Psychology, Biology and Chemistry)
- Sociology

**First Awards 2018**

- Ancient Languages
- Dance
- Design and Technology
- Drama
- Geography
- Mathematics
- Further Mathematics
- Modern Foreign Languages
- Music
- Physical Education
- Religious Studies

**NEW QUALIFICATION STRUCTURES**

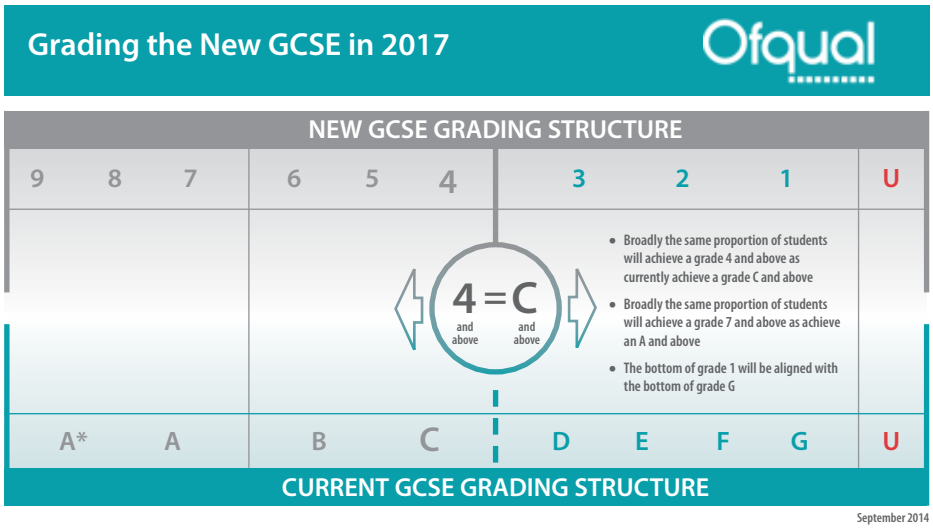
- Fully linear – assessment at end of course
- In principle, assessment by exam only
- A Level: non exam assessment reduced
  AS: exam only with exception of Art and Design
- Graded: A* to E for A Level
  Graded: A to E for AS Level
- Same standard as currently
- AS decoupled; content will be a subset of A Level content, co-teachable with the A Level
- Science – practical work a requirement; graded pass or fail; separate from grade for exam

## Grading

New GCSEs will be graded 9-1 with 9 being the top grade. For each examination, the top 20% of those who get grade 7 or above will get a grade 9 – the very highest performers.

Grade 5 will be positioned in the top third of the marks for a current grade C and bottom third of a current grade B. This will mean it will be of greater demand than the present grade C, and broadly in line with what the best available evidence shows is the average PISA performance in countries such as Switzerland, Finland, Canada and the Netherlands.

The new maths GCSE will be tiered, with grades 4 and 5 available through both tiers.




## No UMS marks

Currently UMS marks are available to students on their results slip and to admission teams. From 2017, no UMS marks will be available for new A Levels.

In a modular assessment system in which candidates can take units in different series, it is important that candidates are not advantaged or disadvantaged by taking an easier or harder paper than their contemporaries. Therefore, each candidate's raw mark is moved onto a common scale – the UMS scale – to ensure that each candidate receives the appropriate amount of credit.

The UMS scale is a fixed scale, whereby A is at 80% of the total UMS for the paper; B at 70%; C at 60%; and so on.

In a linear assessment system, there is no need to combine units or components from different series, and as such, there is no need to use a UMS scale. The candidates taking each component are the same, and they all take it in the same series together. Therefore, there is no need to transform raw marks onto a UMS scale, as they can just be added together. Indeed, it would actually distort the relationship of the components to use a UMS scale, as in some cases you would move raw boundaries which are very close onto the UMS scale, whilst on other components you might move boundaries that are very far apart onto the UMS scale. This would mean marks on one paper might not carry the same weight as on another paper, even if the papers themselves carry the same weight.

For those reasons, UMS will not be used in the linear reformed specifications in A Level and GCSE. Nor will it be appropriate to use total mark as a replacement for UMS, as total marks will vary from exam board to exam board, and, for example, a mark of 146 in one specification might represent a completely different grade from a mark of 146 from another board.

## Linear and modular qualifications to continue in Northern Ireland

Recent announcements from the Department of Education NI have confirmed that local schools in Northern Ireland will be allowed to deliver their courses in either linear or modular form – a choice that will no longer exist in England or Wales.

Students who wish to progress to HE will not be restricted in their choice of exam board for GCSEs or A Levels. However, if schools decide to teach specifications accredited by CCEA (the Northern Ireland Awarding Body), the AS will be coupled with the A2 in the A Level results. More recently the decision has been taken to change the weighting of AS Levels to 40% and A2 levels to 60% in Northern Ireland.

The most recent decision which is different from England is that the assessment of Science practicals in Biology, Chemistry and Physics should remain as part of the overall grade in Science A Levels.

At GCSE, the same rules apply, that schools can choose which exam board qualifications to teach. However if they decide to teach CCEA specifications, the pupils will be studying modular GCSEs and retain the current grading system of A*-G rather than the move to the alternative of 9-1 bands as proposed in England. The one exception to this will be GCSE English which will only be considered valid if awarding organisations include the assessment of speaking and listening as an integral part of the award.

If schools decide to teach with exam boards such as OCR, then all the rules that apply in England will also apply in Northern Ireland.

## And in Wales…

The Welsh Government has made public the way forward for A Levels and GCSEs for first teaching in Wales from September 2015.

A qualification with the AS decoupled from the A Level will not meet the requirements of the Qualification Principles so will not be accredited for delivery in Wales. Wales-only specifications will be introduced in the same subjects as for England with the addition of Welsh.

The Welsh Government has also published draft Qualification Principles for GCSEs and, for specific subjects, Subject Principles. Again, Wales-only specifications will be introduced in the same subjects as England for 2015 with the addition of Welsh Language and Welsh Literature.

# Spotlight on new A Levels

## In the second of our series on OCR's new A Levels, we take a look at Sociology and Psychology.

As with all our new A Levels we have developed our specifications in collaboration with colleagues from higher education, schools and colleges, learned societies, professional bodies and employers.

> "Sociology A-Level updated to include social media, web safety and selfies."
>
> The Guardian

## MORE THAN SELFIES – DEVELOPING OCR'S NEW SOCIOLOGY A LEVEL

The accreditation of OCR's new AS and A Level Sociology specifications saw the subject in the news over the summer.

The new specification has a stronger global dimension to reflect society today and is contemporary in terms of topics and assessments.

The Department for Education published its proposed content for GCE Sociology in September 2013. This document set out the requirements in terms of subject content, knowledge and understanding and skills. OCR's response in December was based partly on evidence from our Sociology Consultative Forum and by research undertaken by our parent organisation, Cambridge Assessment, on transition issues to higher education.

Feedback from the Sociology Forum was that certain options tend to dominate A Level Sociology such as family and education and that there needed to be a move towards new areas of study.

Suggestions for new topics included world sociology, globalisation and cities, technology and society and family and community.

'Classic' aspects of Sociology are still covered, e.g. socialisation, culture and identity and researching and understanding social inequalities, and OCR continues to offer a choice of the most popular topics such as families and relationships and crime and deviance. However, the aspect of the qualification that we and Sociology teachers are most excited about is our new topic on Globalisation and the Digital Social World.

**The new qualification has a straightforward structure:**

| Component Title | Section A | Section B |
|---|---|---|
| **Component 1** Socialisation, culture and identity | Introducing socialisation, culture and identity | One topic of three:<br>• Family and Relationships<br>• Mass Media<br>• Youth subcultures |
| **Component 2** Researching and understanding social inequalities | Research methods and researching social inequalities | Understanding social inequalities |
| **Component 3** Debates in contemporary society | Globalisation and the digital social world | One topic of three:<br>• Crime and deviance<br>• Education<br>• Religion, belief and faith |

Globalisation forms half of the third component – Debates in Contemporary Society – a completely new component that enables students to explore different methods of social enquiry and develop their critical understanding of social processes, change and policy. Students will also choose one other section in this component from crime and deviance, education, and religion, belief and faith.

The sociology of globalisation and digital sociology are both emerging subfields of sociology. The world is rapidly changing. Two of the biggest changes are globalisation and technology. These changes are transforming life – at work, at home and in terms of leisure. Students will be learning about globalisation and the emergence of the global village. Technology is inextricably interlinked with this. The digital revolution is creating a networked global society. We are seeing the rapid rise and fall of virtual communities and digital social networks. The digital divide is a growing concern, with inequalities in terms of access to the internet. Digital communication is having a massive impact on social relationships. All this will be covered in the new qualification. It will be underpinned by a rigorous academic method, sociological theories and concepts.

With more than 1.3 billion people on Facebook, over a million selfies posted each day and more people worldwide having access to a mobile phone (6 billion) than to a toilet (4.5 million), students will analyse how societies manage the positive and negative impacts of, for example, freedom of information, privacy, online safety, equality of access to technology and gender stereotyping.

Judith Mudd, Chief Executive of the British Sociological Association, said: "Sociology is fascinating. It's about our everyday lives and like our everyday lives, it's rich in subject matter and continually evolving. In today's online world, social groups across the globe are connecting and colliding in ways that could not have been imagined before. We owe it to our students and society to reflect these fundamental changes in the way social groups interact in our courses, not just to make sociology real for students, but also to foster scientific analysis of the social impacts of new technologies to help steer further developments in ways that will better rather than break societies. It is surprising that it has taken so long for the global digital revolution to find its way into the A Level curriculum and I am delighted to see it there at last. Well done OCR!"

## ENVIRONMENTAL PSYCHOLOGY TO FEATURE IN OCR'S NEW PSYCHOLOGY A LEVEL

As people return to offices after the summer break and many businesses are moving to 'hot-desking', OCR's new Psychology A Level includes psychology of the workplace.

A Level students will refer to research that found that workers in companies which allow 'desk clutter' feel a greater sense of well-being and job satisfaction and experience less stress. It showed women often decorate their desks with photos of family and friends while men like to display symbols of achievement, for example in sports. Women also personalise their desks more than men: the research suggests women may feel a greater need to stamp their identity on their workplace because they feel they 'own' it less than men.

Psychology is the fourth most popular A Level subject and is one of the most popular degree subjects in the UK. Environmental Psychology, including topics such as the stress caused by aircraft noise and attitudes to recycling, is among new and contemporary issues to feature.

Alongside new topical content, 10% of the new Psychology A Level qualification will be quantitative work involving data analysis, with all students doing their own practical research.

Mark Dawe, OCR Chief Executive, said, "This minimum requirement ensures that students build up strong statistical and numeracy skills. Added to the critical thinking, analytical skills and essay writing the qualification demands, Psychology is an intellectually stretching but very fulfilling subject that produces highly employable students".

Changes to Psychology A Level coincide with news that one of the world's top business schools, Yale School of Management, has devised a test to assess students' emotional intelligence, or psychological literacy, because leadership demands an ability to read people, understand and manage emotions and communicate effectively.

OCR has also looked closely at the work of the Higher Education Academy (HEA), the national body for enhancing HE learning and teaching, to ensure its new Psychology A Level qualification reflects contemporary theory and practice at university level, including the important area of psychological literacy.

Dr Julie Hulme, Consultant in Academic Practice at the HEA, believes psychological literacy "offers potential solutions to many of the world's problems – large or small".

"There is no doubt that Psychology has a big impact on all areas of life, from education and health, to the economy and crime," says Vicky Hunter, OCR Subject Team Manager. "It gives students a greater understanding of why human beings are wonderful, kind, creative and sometimes broken or cruel. It uses rigorous scientific methodology, requiring students to formulate theories, test hypotheses and analyse reports with rigorous statistical techniques, to come up with important findings."

| Component Title | |
|---|---|
| **Component 1**<br>Research methods | Planning, conducting, analysing and reporting psychological research across a range of experimental and non-experimental methodologies and techniques. |
| **Component 2**<br>Psychological themes through core studies | Introduces some of the central areas of investigation in psychology organised in key themes. Each key theme is represented by a classic and a contemporary core study. |
| **Component 3**<br>Applied Psychology | Compulsory section on issues in mental health.<br>Learners will also study ***two*** out of the following applied options: Child psychology, Criminal psychology, Environmental psychology, Sports and exercise psychology. |

# In conversation

*UCAS has announced that there has been a 16% rise in 2014 in HE acceptances of students taking vocational qualifications. This trend has been taking place over the last few years and Mary Curnock Cook, UCAS Chief Executive, has said "it is now hard to ignore the increasing importance of vocational qualifications".*

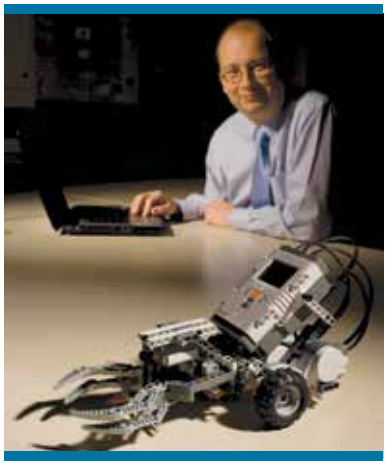
**Jonathan Adams, Head of Engineering at the University of Northampton, shares his experience of working in collaboration with employers, schools and colleges to support the vocational route to university.**

**What has been your career path into your current role?**

My interest in working on school and college collaboration has definitely been shaped by my own experiences. I left school at 16 to take up an engineering apprenticeship. I knew I wanted to become a research engineer so I started my bachelor's degree in my 20s, I completed my master's in my 30s and my PhD in my 40s. I believe there is more than one route to any pathway which should not be restricted by age or stage.

**Vocational qualifications are being reformed and the government has stated that HE should play a key role in this reform. In practice how do you see this happening?**

At the University of Northampton we have been involved for many years. This started with getting involved in the former diploma in engineering. (Diplomas were an initiative from the Tomlinson Review 2005, but were disbanded in 2010.) Since then we have worked with awarding bodies in the design and development of vocational qualifications. Recently I have been involved with OCR helping with the development of the new Cambridge National and Cambridge Technical in Engineering (see page 10 for more information). The great thing about being involved means we have been able to ensure that the qualification is fit for 21st century engineering and the content is relevant and contextualised. We have been able to pick and mix from existing maths and science content and make it appropriate to engineering, so it is maths for engineers and science for engineers.



**Jonathan Adams**
Teaching Fellow of the University of Northampton

> **"The great thing about being involved means we have been able to ensure that the qualification is fit for 21st century engineering."**
>
> Jonathan Adams

A key element of the reform is to include some external assessment. This is important for engineering. Within engineering there is a need to problem solve, to think on your feet – external assessment is a way of ensuring this gets assessed. It doesn't necessarily mean it has to be a written exam and there is the opportunity to explore other types of external assessment.

Another key benefit for higher education is that the transition to an undergraduate engineering programme is made that much easier.

**Your university has been involved in the development of Daventry and Silverstone UTC. What was the interest behind this collaboration?**

The university sees the establishment of University Technical Colleges as part of the story for producing the next generation of engineers. Daventry UTC has a focus on engineering in the built environment and Silverstone on high performance engineering. Our involvement is recognition that the engineering industry is experiencing a skills shortage as it loses its highly skilled workforce through retirement. UTCs can help transform school-based technical education. Working with awarding bodies such as OCR, we have been able to give curriculum and

*Within engineering there is a need to problem solve, to think on your feet – external assessment is a way of ensuring this gets assessed.*

content advice through the development of vocational qualifications as well as providing teaching input. It also means students can see engineering as an option from the age of 14. At Northampton we want to make sure that students are able to access engineering degrees through a number of routes and seamless progession.

I also sit on the Baker Dearing Steering Group and give advice and get involved with other universities who are considering working with a UTC.

**What have been the high points about being involved?**

Having degree-ready students – students who have studied a qualification where the content is up to date, relevant and contextualised. We can plan our programmes at university more effectively by understanding and knowing the skills and knowledge that students will have acquired prior to coming to us and importantly we introduce engineering as an option at age 14.

This is not an arrangement just for the University of Northampton; students who study these types of qualifications will apply all over the country for different engineering courses.

Another benefit is that we work closely, rather than against, our local FE colleges. They are able to provide levels 4 and 5 and we can focus on levels 6 and 7.

**What do you see as the future for university/school/employer collaboration?**

This is definitely a growing area which is exciting and good for all involved. At the University of Northampton we are lucky that we are supported and work closely with local employers. This is helped by the Northampton Engineering Training partnership, a partnership of engineering companies in the region linked to the university. The partnership exists to create a pool of industry-ready engineers of the highest calibre. Through the partnership we are able to offer work experience and placements as well as take on sponsored students at different stages of their learning. It is a very good example of collaboration between academia and industry.

This sort of collaboration is also being supported by the government with an investment of £40 million for higher apprenticeships.

**What would be your key message to students at 16 considering taking vocational qualifications?**

Having progressed in an unconventional way myself, follow your heart. See education as a journey - it doesn't have to be a sequential thing, there are various routes to an occupation, explore these and don't give up on your goal.

A number of recent reports including *Robbins Rebooted*, *Forging Futures*, and *The Witty Review* point to a growing collaboration between employers, universities, schools and colleges. OCR has been developing such partnerships as it extends and redevelops its suite of vocational qualifications which includes Cambridge Technical qualifications, apprenticeships and involvement with University Technical Colleges.

# Supporting the future

# Skills Requirements

## OCR Cambridge Technical in Engineering

**OCR has worked in partnership with practising tutors and teachers, as well as industry specialists and leading employers, in the development of our Cambridge Technical qualifications. Cambridge Technicals are targeting learners aged 16+ in either a school or further education environment. The latest edition to our Cambridge Technicals suite is Level 3 Engineering.**

In line with new Department for Education (DfE) guidance, we have developed both 'Applied General' and 'Tech Level' qualifications. Our new qualifications meet the DfE qualifications criteria for performance tables from 2017, and to attract UCAS points. The key difference between the two qualifications is as follows: Applied General qualifications are smaller in size (minimum 150 guided learning hours) and are designed to sit alongside other qualifications such as A Levels; the Technical qualification is larger (minimum 300 hours) and will be taken as the substantive qualification within a programme of study.

The two Diplomas have four vocational pathways within them which can be followed, and learners can achieve two of these: Mechanical Engineering & Design, Electrical & Electronic Engineering, Automation Systems & Control and Manufacturing.

There was recognition that a scientific and mathematical core was needed for all sizes of qualification, and that both employers and particularly higher education institutions (HEIs) needed to clearly see evidence of this taught content. The maths and science content has been matched with current GCE content but has been done so within an applied engineering context.

Alongside maths and science, a wide range of centre assessed units with practical and wider project-based assessment opportunities exist, as well as examined units on the Principles of Mechanical Engineering and Principles of Electrical and Electronic Engineering.

| Component Title | Section A | Section B |
|---|---|---|
| **Level 3 Cambridge Technical Certificate in Engineering Principles (180 glh)** | **Applied General qualification**<br>**Equivalent size to AS** | 3 x 60 glh units – all units externally examined.<br>Provide learners with the opportunity through applied learning to develop core principles and specialist knowledge and understanding required in the engineering sector. |
| **Level 3 Cambridge Technical Extended Certificate in Engineering (360 glh)** | **Applied General qualification**<br>**Equivalent size to A Level** | 6 x 60 glh units – minimum of 4 externally examined units and a choice of further examined units or centre assessed units moderated by OCR. |
| **Level 3 Cambridge Technical Foundation Diploma in Engineering (540 glh)** | **Technical level qualification**<br>**Equivalent to 1.5 A Levels in size** | 9 x 60 glh units – minimum of 3 externally examined units and a choice of further examined units or centre assessed units moderated by OCR.<br>There are 4 specialist endorsed pathways and double endorsements are possible. |
| **Level 3 Cambridge Technical Diploma in Engineering (720 glh)** | **Technical level qualification**<br>**Equivalent to 2 A Levels in size** | 12 x 60 glh units – minimum of 4 externally examined units and a choice of further examined or centre assessed units moderated by OCR.<br>There are 4 specialist endorsed pathways and double endorsements are possible. |

**Joe Gifillan** recently completed his first year of an Engineering degree at Oxford University in 2014, and reviewed these qualifications during their development:

> *The qualifications seem to be very relevant to further study in engineering and have a good breadth of content. There is also a good choice of optional units covering a range of skills that would be hard to come across in conventional GCE qualifications... Doing this course would have set me up perfectly for the first year of my general engineering degree... Overall the qualifications look really good to me, especially the A Level equivalent course (Extended Certificate) as I know the content covered would have been of more use to my university course than the A Levels I studied.*

**Brian Holliday**, Divisional Director from Siemens Industry Automation, a division of Siemens Industry, agrees that such qualifications are crucial:

> *So the challenge of attracting younger people to the industry continues. But this only tells part of the story. Just as important is the early exposure engineering students have to quality academic study combined with real world activity, a grounding which arms them earlier with skills, experience, and enthusiasm to join a workforce and make a real contribution.*
>
> *Vocational/applied or learning by doing lies at the heart of this challenging objective and is one that Siemens passionately believes in.*

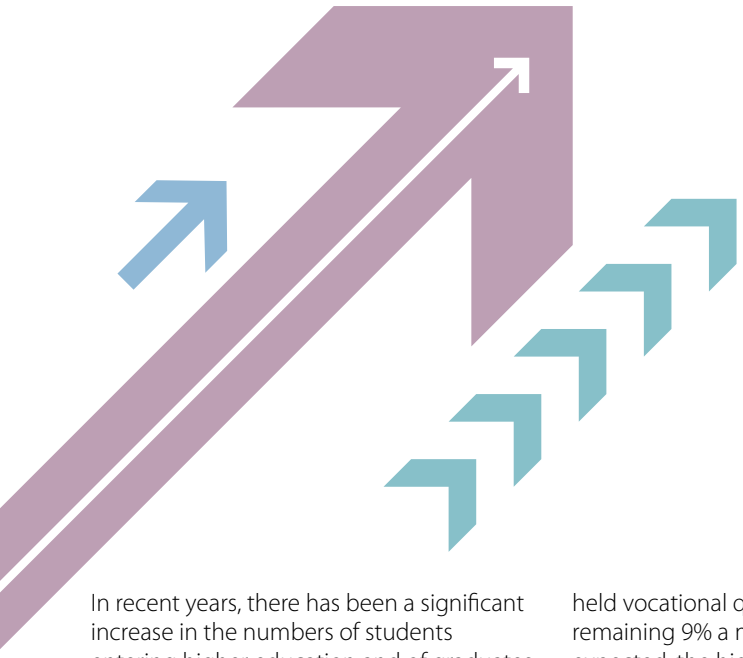
Academic and vocational

# Pathways to Higher Education

## and their impact on the choice of institution and field of study

**by Carmen Vidal Rodeiro, Tom Sutch, Nadir Zanini**
Research Division,
Cambridge Assessment

Students applying to study a course in a higher education institution have to make two choices: what subject to study and at which institution. These decisions are influenced by a range of different factors, for example their personal interests, their socio-economic background and, in particular, their prior qualifications and the grades obtained in them. Previous research into progression to higher education has shown that the latter, that is, the prior educational achievements of the students, is the one with the highest influence. This clearly makes sense as some qualifications and, in some cases specific subjects, are a necessary condition for studying a course in a specific higher education institution.



> **"Students with academic qualifications were most likely to study at degree level, whilst students with vocational qualifications were more likely to enrol on foundation degrees or HND/HNC courses."**

In recent years, there has been a significant increase in the numbers of students entering higher education and of graduates in the labour market. At the same time, widening participation has been seen as an issue of critical importance, as a result of widespread concerns about social justice and social mobility. In particular, the commitment to widening participation has encouraged the growth of more, and different, pathways to higher education study beyond the traditional school leaving qualifications.

This article outlines the main outcomes of a recent research study carried out by researchers at OCR's parent organisation, Cambridge Assessment, looking at how different level 3 qualifications, both academic and vocational, are used by young people to progress to higher education. Understanding the use of different pathways for progression should enable fairer and more transparent admissions to higher education.

The data for the analyses, provided by the Higher Education Statistics Agency, covered all English, full-time, first year undergraduates aged 17-19, studying at university in the UK in the 2011/12 academic year. It contained detailed information on individual students, such as the student's socio-demographic characteristics (for example their gender, socio-economic background and the type of secondary school they attended), the qualifications prior to starting the higher education course, the higher education institution where the student was enrolled and the course/subject studied.

The research found that, although the percentage of students from vocational and mixed backgrounds has been growing in the last few years, the majority of the first year undergraduates held academic qualifications (80%), approximately 11% held vocational qualifications and the remaining 9% a mixture of both. As expected, the highest percentages of students with academic backgrounds were in prestigious and highly selective universities (for example Russell Group universities) and the highest percentages of students with vocational and mixed backgrounds were in recruiting universities or universities with former 'polytechnic' status (for example universities in the University Alliance or the Million+ groups). This though might be partly related to the type of courses offered by each group of institutions. In fact, it has been argued that many post-92 universities, further education and higher education colleges have a rich experience in developing learning programmes and recruitment procedures that are tailored to the needs of vocational learners.

Regarding subject area at university, students from vocational or mixed backgrounds were more likely than average to enrol in fields of study which would allow them an immediate return in the labour market (for example, education, arts, business administration, sports or subjects allied to medicine). However, they were less likely than average to enrol in the more academic subject areas (for example, history, geography, languages, medicine or physics).

Students with academic qualifications were most likely to study at degree level, whilst students with vocational qualifications were more likely to enrol on foundation degrees or HND/HNC courses.

Using vocational qualifications as a means of widening access to Higher Education seems relatively successful, as students with these qualifications, who tend to come from more disadvantaged socio-economic backgrounds, are increasingly participating in higher education. However, the differences in progression routes found in this research could still be cause for concern as students from certain backgrounds tend to apply to universities/courses that could bring fewer economic benefits. Such students could also be disadvantaged in the labour market.

This piece of work is a snapshot of the distribution of prior qualifications in higher education in one academic year, 2011/12. However, recent and forthcoming changes in education and assessment, particularly relating to reform of level 3 qualifications (AS and A Level reforms) and to university admissions policies (changes to the controls on students numbers, which determine the number of funded university places) could potentially affect the current progression to higher education. The Research Division of Cambridge Assessment will therefore continue to carry out research studies in this area over the following years.

If you are interested in the full report from this research, please get in touch with Carmen Vidal Rodeiro at **vidal.c@cambrigeassessment.org.uk**.

# What's the future of the new AS?

## PAUL STEER, OCR DIRECTOR OF POLICY AND STRATEGY, TAKES A WALK AROUND THE ISSUE

**Paul Steer**

**Come September 2015 teachers will be delivering the first batch of revised, fully linear A Levels.**

Not surprisingly, people are beginning to ask questions about the purpose of the new AS – is there really any point in students taking it? Is it worth the cost in these straightened times? Will there come a time when people stop taking it all together?

Talking to teachers and a wide range of stakeholders reveals that most people remain undecided as to how they will treat the new AS. There is a strong element of 'wait and see', and this is probably the right view to take – the arguments for and against are finely balanced and there are a range of unknowns, yet to be determined.

The regulator has made it a requirement that AS should be co-teachable. Broadly, this means that the same class of pupils can be taught both the AS and the A Level in their first year, with the AS being the point of termination for some pupils, and others going on to take the full A Level at the end of their second year. Superficially, this looks like business as usual, but the linear nature of the A Level introduces some important structural changes. The A Level syllabus covers two years' worth of study time and anything learned in that two years may come up in the final exams. Furthermore, the AS is notionally set at a slightly lower level of demand, designed, as it is, for pupils who have only been studying for one year. In other words, the new A Level is no longer a game of two halves.

The challenge of teaching two terminal exams side by side with different points of termination will be greater for some subjects than others. Typically, those subjects which are content heavy, such as History, will be those presenting the greater complications.

Of course, there are those who never liked the AS in the first place. They blame it for generating additional, unnecessary assessment time that eats into opportunities to teach their subject. They also believe that the 'modular' nature of the current A Levels compartmentalises learning into silos that compromise breadth and limit pupils' opportunities to make links between different topics and skills across the whole syllabus. The champions of the linear A Level will be well-served by the coming reforms.

Pupils like to know how well they are doing. So do teachers. So do the people who manage the teachers. For many, the AS has become an important measurement point. Institutions and teachers are understandably nervous about letting go of the AS when it provides reliable information about the current and potential performance of pupils and teachers.

The reliability of AS as a predictor of A Level performance is very high, but, then again, this is not surprising when it comprises 50% of the final A Level grade. The correlation of performance between AS and the linear A Level may prove less reliable, but we will have to wait and see.

So long as many universities continue to ask for AS results as part of the admissions process, it seems inevitable that AS will continue to be taught, whatever the challenges. What different universities will ask for in the future, however, seems increasingly uncertain. As the HE 'market' evolves, it seems likely that there will be disruption and increasing disparity between entry requirements. Also UCAS has overhauled its tariff and, under the new formula AS is 'worth' less than half an A Level. Some have interpreted this as a sinister signal from HE but it is probably just the result of applying the UCAS formula.

> **"So long as many universities continue to ask for AS results as part of the admissions process, it seems inevitable that AS will continue to be taught, whatever the challenges."**

Some of the highly selective universities, notably Cambridge, have been outspoken in support of retaining AS in its current 'coupled' format. Its reliability as a predictor of final grades is valued, as is evidence of its contribution to social mobility and access.

The final picture in relation to funding of A and AS programmes is unclear, but there are very real concerns about the range of A Level subjects institutions may be able to offer in the future and the extent to which the cost of supporting AS study would be viable. Obviously this one will need to be watched very carefully.

The AS allows four subjects to be studied in the first year, giving students the opportunity to explore a wider range of disciplines than might otherwise be the case. Even with the AS, A Level programmes are relatively narrow and specialist when compared with the broader baccalaureate style approaches that exist in many other parts of the world, so people need to think twice before ditching the AS if that means narrowing things down to three subjects.

But, if an institution decides to withdraw or limit AS availability, what could it do with the space left on the curriculum? Might this be an opportunity? For example, could a refreshed and more inclusive Extended Project Qualification, offer a chance to offer a new kind of breadth – especially if it were brought forward a year? Could the planned Core Maths provision offer something vital to students who have selected largely Arts-based subjects? What about activities that take people out of the classroom and into the community? And surely it is time to take a fresh look at the varied and extensive vocational provision on offer, especially with newly established government policies which have brought in new Tech Levels and Applied General qualifications.

# Get involved

**OCR runs a series of consultative forums: a higher education (HE) strategic forum, a Vocational Applied learning forum and 16 subject consultative forums. These forums allow OCR to consult with key subject-based stakeholders so that their requirements and expertise can inform OCR's plans and developments.**

The HE forum is run three times a year and the subject forums twice a year. Membership of the HE forum is solely from HE while the subject forums' membership comprises a range of people from across the subject community including teachers, university academics, representatives from subject and professional associations, learned societies, charitable organisations and employers.

We want to hear and listen to a wide range of views. If you are interested, why not join us at one of our forums? For further information please contact Annette Allen at **annette.allen@ocr.org.uk**.

**Spring 2015** OCR Consultative Forum Timetable

| | |
|---|---|
| Business | 25 March |
| Classics | 25 February |
| Creative Arts | 12 February |
| Economics | 05 March |
| English | 25 March |
| Geography | 11 March |
| Health and Social Care | 26 March |
| HE Strategic Forum | 12 March |
| History | 04 March |
| IT and Computing | 29 April |
| Maths | 19 March |
| Modern Foreign Languages | 18 March |
| Psychology | 22 April |
| Physical Education | 16 March |
| Religious Studies | 28 April |
| Science | 12 March |
| Sociology | 23 April |
| Vocational Applied Learning | 01 April |

# Who we are

**OCR (Oxford Cambridge and RSA Examinations) is a leading UK awarding body, committed to offering qualifications that engage learners of all ages at school, college, in work or through part-time learning programmes to achieve their full potential.**

- OCR is a not for profit organisation so success, for us, is measured through the impact and reach of our activities and the scale of our contribution to helping learners realise their aspirations.
- Our purpose is to work in partnership with others to provide qualifications that support education in ways which enable all learners to reach their full potential and to recognise and celebrate their achievements.

Each year more than three million students gain OCR qualifications, which are offered by 13,000 centres including schools, sixth form colleges, FE colleges, training providers, voluntary organisations, local authorities and businesses ranging from SMEs to multi-national organisations.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate, a department of the University of Cambridge. The Cambridge Assessment Group incorporates three major exam boards: University of Cambridge International Examinations (CIE), Oxford Cambridge and RSA Examinations (OCR) and Cambridge English.

**In the UK, the Cambridge Assessment Group is the only public examination board affiliated to a university. It plays a leading role in researching, developing and delivering educational assessment to eight million learners in over 170 countries every year.**

CAMBRIDGE ASSESSMENT

UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate


## OCR Customer Contact Centre

### Vocational qualifications

Telephone **024 76 851509**
Facsimile **024 76 851633**
Email vocational.qualifications@ocr.org.uk

### General qualifications

Telephone **01223 553998**
Facsimile **0123 552627**
Email general.qualifications@ocr.org.uk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