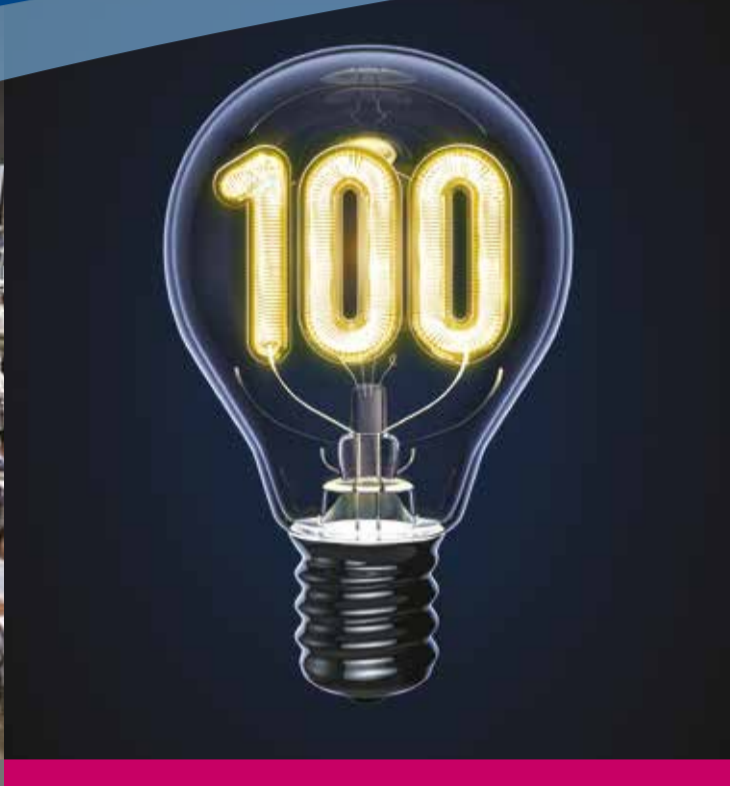


# Achieve

Summer 2016



CAMBRIDGE ASSESSMENT



## Welcome to *Achieve*

The latest news from Cambridge Assessment, the University's international exams group.

## Celebrating a milestone in open data

The reports that offer a valuable insight into assessment. see page 3

## South Africa hosts Cambridge first

Global education leaders and experts gather in Johannesburg. see page 5

## Textbooks: how England is learning from the best in the world

Publishers have been praised for the "remarkable speed" in which they have responded to a call to restore high-quality textbooks in England's classrooms.

Launching *The Cambridge Approach to Textbooks*, a set of principles for designing high-quality textbooks and resource materials, Cambridge Assessment's Group Director of Assessment Research and Development Tim Oates CBE said that some publishers in England had been agitated when, in November 2014, he made a call for improvement. His *Why Textbooks Count* paper, backed by the Schools Minister for England, had set out what the challenges were and now, two years on, the Cambridge Approach was the practical outcome. Tim described how meetings had taken place over the past two years involving publishers, representative bodies such as The Publishers Association and the British Educational Suppliers Association, and the British government.

"Cambridge's criticism [in *Why Textbooks Count*] was not of people, or particular publishers, but of the set of relationships which were obtaining in England and were giving rise to poor quality," said Tim, who chaired the review of the National Curriculum in England in 2010.

"We wanted to help policy makers and those working with publishers, including teachers, understand the



Tim Oates CBE, Cambridge Assessment's Group Director of Assessment Research and Development, launches *The Cambridge Approach to Textbooks*.

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Prof Michael Young

## A 'powerful knowledge' curriculum for all

Many schools offer a version of a 'powerful knowledge' curriculum for some or even all their students. The difficult pedagogic and political issues arise when the principle is extended to all pupils in all schools.

School curricula organise knowledge quite differently from the knowledge that pupils bring to school. It is different in structure – with its distinct boundaries and rules – and different in purpose; it treats the world as an object of enquiry and potentially a source of new knowledge, not just as an extension of experience. Denying access to powerful knowledge to some pupils traps them in the limits of their experience. However, powerful knowledge has its downside. It is alien to many pupils and hard work for most to acquire.

If we accept that there is 'better knowledge' then this knowledge must surely be an entitlement for all pupils. How could anyone not want the best knowledge that we have to be the basis of the curriculum? Despite this, some on the political Right still think that the ability to grasp 'better knowledge' is innate and unequally distributed, while too many on the Left see the idea of 'powerful knowledge' as elitist and discriminating.

The idea of powerful knowledge implies a particular view of both knowledge and human beings. Knowledge is neither arbitrary nor is it tied to the interests of the powerful. It is tied to the specialist communities which produce new knowledge in every field. As human beings we are born not with different abilities but with a 'desire for knowledge'; if it were not so, bringing up children, let alone teaching, would be impossible.

I don't want to play down the pedagogic challenges that 'powerful knowledge for all' presents to teachers or to imply that it is an immediate solution to raising attainment. Educational success and failure are related to much wider issues. Furthermore, we know too little about the best ways of structuring powerful knowledge to make it accessible to more pupils.

Powerful knowledge is not just a curriculum principle – it is also a pedagogic principle akin to the idea of justice for lawyers. It defines what it is to teach – whether marking pupils' work, or selecting texts, teaching is always about extending pupils' knowledge.

For the most part, we trust the professional work of teachers. However, trusting teachers is not always easy for governments and they rely on testing to back up their lack of trust. Testing has an educational purpose, but it also has its limits. 'Powerful knowledge for all' is a curriculum principle for shaping all education policies.

Michael Young is a sociologist and Emeritus Professor of Education at UCL's Institute of Education.

### NEWS IN BRIEF

## 'Try before you buy' course for aspiring English teachers

Anyone interested in teaching English as a foreign language can now enrol on a free online course to get a taster of what it is like.

*Exploring the World of English Language Teaching* is a six-week course that has been developed by FutureLearn, a social learning platform based in the UK, and exam board Cambridge English Language Assessment.

The core audience is young graduates, but it is suitable for anyone who is interested in becoming an effective English teacher and who has C1 level English on the Common European Framework of Reference for Languages. About 10,000 students have signed up for the course, ranging from gap year students to existing teachers and people looking for a career change.



"Great teachers inspire great learners, but some of the best future teachers might not realise yet that it is the career for them," said Geoff Stead, who heads up a new digital team in Cambridge English.

"We're hoping to inspire that next generation of English teachers, as well as helping them understand the real challenges they will face and identify the skills they will need to be effective."

## Winning at Winnipeg

Canada's Winnipeg University has joined the growing list of institutions using an advanced English test as proof of applicants' language skills.

The university has chosen to accept Cambridge English: Advanced in addition to Cambridge English: Proficiency while fellow Canadian higher education institution Douglas College has chosen to accept both. In the US, Kentucky's Bellarmine University has recently announced that it will accept the full suite of

Cambridge English: First, Advanced and Proficiency from international students applying to their undergraduate and graduate courses.

Prominent names in the world of business have also announced that they will start accepting various Cambridge English exams, including Pakistan International Airlines, Skoda India and Tenneco Automotive Iberica. Cambridge English exams are currently accepted by more than 20,000 organisations worldwide.

## Schools invited to take part in educational innovation

An international exam board is introducing on-screen versions of popular English and science tests in a move that reflects the increased use of technology in teaching and learning.

After a consultation with schools, Cambridge International Examinations is starting to introduce optional on-screen assessments in October 2016. The first on-screen tests will be versions of Cambridge Secondary 1 Checkpoint tests.

To make sure that on-screen assessments meet the needs of teachers and students, a network of schools will run trials before the assessments are offered to a wider audience. Innovations in this area will be led by good practice rather than just what is technologically possible, and schools will continue to have the option of paper-based assessments.

Schools are still able to express their interest in offering the on-screen tests by completing a form on Cambridge International Examinations' 'What's new' web page.

## Josh is the best in the business

### An apprentice with technology giant IBM has been named Advanced National Apprentice of the Year at a ceremony in London.

Joshua White joined IBM after deciding the university route was not for him and is now working at their offices in Warwick, England, as a business analyst. The award from the National Apprenticeship Service marks the end of an extensive search to identify the best individual apprentices in the country.

Jez Brooks, Early Professionals Programme Manager and Apprenticeship scheme leader at IBM, said: "We are absolutely delighted for Josh, and so proud of what he has achieved. Josh is a terrific ambassador both for IBM and for apprenticeships as a career pathway. He is a great example that university isn't for everyone, and that you can still be successful in your learning, development and career progression from the moment you begin work."

UK exam board OCR provides the courses and qualifications for all apprentices on IBM's award-



Josh White, Advanced National Apprentice of the Year, receives his award at a ceremony in London.

winning programme. Charlotte Bosworth, OCR's Director of Skills and Employment, said: "Congratulations to Josh and to IBM for the award which recognises his outstanding work and commitment. OCR is proud to support learning on apprenticeship programmes."

## Textbooks: how England is learning from the best in the world

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complexity of these relationships and manage them in such a way that would drive us towards high-quality materials that are supportive of the best pedagogy in the classroom.

“And what I found extraordinary and remarkable is the speed in which those beneficial collaborative arrangements have been put in place in this country.

“It’s been less than two years and the kind of texts I’m now seeing around are based on best practice from around the world. Just look at the speed of reform we’ve managed to achieve in England.”

The seminar also heard from Professor David Lambert from University College London, who said that an anti-textbook culture had developed in England over the past century but that he looked ahead to a future where a knowledge-based curriculum based on good textbooks would be critical.

Speakers included Fei Chen Lee from Times Publishing Singapore, Debbie Morgan from the National Centre for Excellence in the Teaching of Mathematics, Lis Tribe from Hodder Education Group and Bron Duly from RM Books.



A panel discussion involved (from left to right) Bron Duly from RM Books, Jane Mann from Cambridge University Press, Lis Tribe from Hodder Education Group and Lord Knight from TES Global.



The seminar also heard from Jane Mann, Director of Education Reform at Cambridge University Press. She spoke about how stakeholders and decision makers needed to define “what quality looks like” when it comes to textbooks, saying that objective, evidence-based criteria such as the Cambridge Approach provided a useful means of achieving that goal.

Giving another side to the debate, Lord Knight, Chief Education Adviser at digital education company TES Global, spoke about the wealth of crowd-sourced content which it manages and the way in which digital materials can co-exist alongside suites of paper-based materials, with teachers using the distinctive assets of each. The seminar ended with a lively debate between the audience, speakers and those participating online.

Clockwise from left: Aisling Brown from the Stephen Perse Foundation, Abigail Sellen from Microsoft Research and Jane Mann from Cambridge University Press.



## Celebrating a milestone in open data

They offer a valuable insight into the world of exams, from what subjects are being studied, at what age, and by whom, to the accuracy of forecast grades or who is getting an A\* in their A Level.

Now international education provider Cambridge Assessment has reached a milestone with the publication of its 100th Statistics Report. Up to 2005 the Qualifications and Curriculum Authority – the predecessor of today’s England exams regulator Ofqual – had published statistics reports, but when it stopped doing so Cambridge Assessment began publishing its own series.

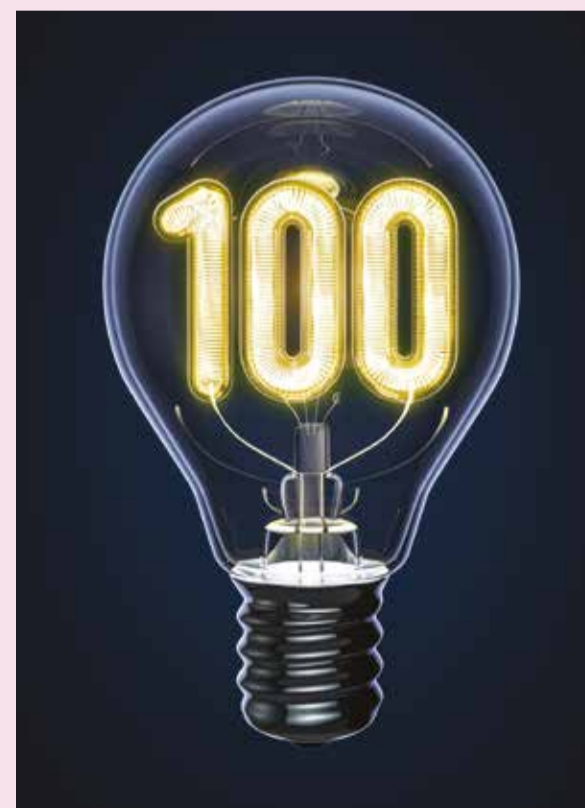
The reports are part of the Group’s commitment to transparency and access to exams data, and provide information about the exam system that can be used by all.

Tim Oates, Cambridge Assessment’s Group Director of Assessment Research and Development, said:

“More than 10 years ago when the QCA stopped publishing regular stats reports, we saw that there was a vacuum that needed to be filled and so began publishing our own series.

“The reports are consistently accessible and clear and, most importantly, available to all. They often reveal important trends and patterns in education and we see them as an important part of our educational mission.”

The latest reports are on A Level and GCSE uptake and results by gender and by school type in England. All 100 reports can be accessed on the Cambridge Assessment website.



Cambridge Assessment has published its 100th Statistics Report.

## Canterbury gets Technical

A college in one of England's most historic cities has become the 1,000th school to use Cambridge Technical qualifications.

The qualifications have been designed to give 16- to 19-year-olds the skills to progress to university or into the workplace. Canterbury College in Kent has registered candidates for the qualification as part of the two routes on offer at its Swale Campus: Business and E-Office Skills Certificate Level 2 and Business and Retail Certificate Level 2.

Tutor Anita Goymer said she has found teaching Cambridge Technicals over the past year very straightforward.

"We were worried at first as some of our students struggle with formal exams, but the scope of the qualification allowed for us to plan written tasks, practical activities, observations, discussions and group work for all the units. We have seen our students gain confidence throughout the year – they are now striving for merit and distinction grades. They have generally become more independent learners.

"The breadth of units available with these qualifications allows us to offer two specialist routes. And there has been considerable support via OCR's website which offers resources, build-up activities and task sheets, example assignments and exemplar work, all of which have helped tremendously – especially as I have several new members in the teaching team this year."

Meanwhile OCR has rolled out extra dates for schools and colleges preparing to teach Cambridge Technicals from September 2016, following confirmation in April that OCR's Level 3 vocational range will count in the 2018 16–19 performance tables in England.

## Global appeal for study programme

A study programme for assessment professionals has attracted delegates from around the world.



Now in its 11th year, the Cambridge International Study Programme 2016 welcomed delegates from a range of countries including South Africa, Ghana, Indonesia, Zambia, and for the first year, Thailand. The programme, which is run by the Cambridge Assessment Network, aims to provide a complete guide to the processes involved in the design and delivery of valid and robust examinations.



Amidst the hard work, attendees also had a chance to experience some quintessential Cambridge activities, including punting on the river Cam and a formal dinner at Peterhouse College.



The Cambridge International Study Programme welcomed delegates from around the world.

## A warm welcome in India and Nepal



Michael O'Sullivan, Chief Executive, Cambridge International Examinations, visited India and Nepal in April. He spoke to students, teachers and school leaders at Cambridge schools, and met government representatives from both countries.



## South Africa hosts Cambridge first

An international exam board has held a global conference in South Africa for the first time, reflecting the growing importance of Sub-Saharan Africa in education.

Education leaders and experts from across the world gathered in Johannesburg at the end of April for the first of this year's three Cambridge Schools Conferences.

The location was chosen because of the growing number of schools in Sub-Saharan Africa taking up Cambridge International Examinations programmes and qualifications. The two-day conference welcomed more than 200 delegates from Cambridge schools in 27 countries around the world.

Taking 'leading learning' as its theme, the conference offered a packed programme of speeches by leading experts, workshops, networking opportunities and an exhibition.



Speakers included Professor Cheryl de la Rey, Vice-Chancellor and Principal of the University of Pretoria, Tristian Stobie, Director of Education at Cambridge International Examinations and Professor Guy Claxton, Visiting Professor at King's College London.

A delegate from a Cambridge school in South Africa said: "The conference was practical and insightful. It helped us look at how we as teachers can reinvent learning so we can lead children into learning without forcing them to do it, and also giving them the right equipment to enable them to learn. It has also showed us why it's important for us to take a step back and change our mindset so we can inspire our children to learn. It has been a very beneficial conference."

A short video featuring highlights of the event has been posted on Cambridge International Examinations' YouTube channel. The conference was the first of three to be held this year – the next one will be at Homerton College, Cambridge on 7–9 September, and there will be a December conference in Malaysia.



## Time for a new approach to teacher development?

Classroom observation is key for teacher development policy around the world but it's time to consider more collaborative approaches, the English language teaching community has heard.

Speaking at the annual International Association of Teachers of English as a Foreign Language conference in Birmingham, UK, Monica Poulter from Cambridge English Language Assessment explained that classroom observation has a huge role to play, but traditional approaches can be challenging for teachers, especially where quality control as well as development is part of the process.

She explained that, while teaching qualifications usually include observation, teachers and students often change their behaviour when being observed and find it hard to act naturally. She suggested that more consideration should be given to models in which teachers take ownership of their own Continuing Professional Development through, for example, team observations or by using video recordings. She suggested that these kinds of activities can provide more sustainable professional development than the traditional classroom observation, which can sometimes be a negative and stressful experience for the teacher.



Monica Poulter from Cambridge English Language Assessment.

## "And now you may begin" – the story of an exam paper

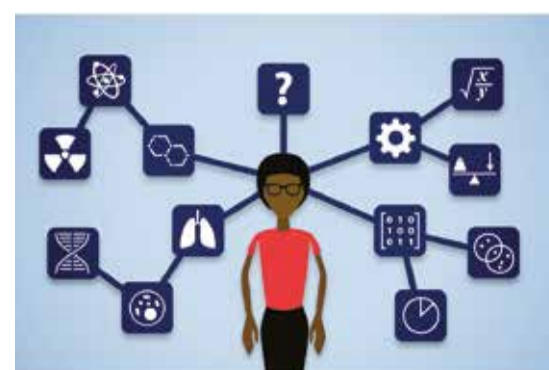
Did you know that an exam paper starts life about a year before the exam is taken?

With millions of GCSE and A Level students taking exams this summer in the UK alone, exam board OCR has outlined the key steps in creating an exam paper in a new video for students. The video is part of the board's 'Explaining examining' project to provide information on the basic processes of assessment.

The video explains how questions must be set at the right level, cover topics relevant to the course and be clear. Exam questions are designed so all students can demonstrate their knowledge, skills and understanding. Not every topic on a GCSE or A Level course will be examined every year however, and a good exam paper is designed to have a variety of questions on it, from straightforward ones to more demanding ones, so students of all abilities are tested. The new video complements a video explaining how OCR marks and grades exams.



To see the new videos and factsheets, go to [www.ocr.org.uk/about-us/explaining-examining](http://www.ocr.org.uk/about-us/explaining-examining).



## Conference explores how to create 'self-aware learners'

Building students' capacity to understand how they think and become 'self-aware learners' is likely to bring about marked and sustained improvement in their educational achievement, a conference has heard.

More than 250 principals from 100 Cambridge schools in Pakistan attended a conference in Lahore which examined the theme of 'Learning how to learn'.

During the event, staged by exam board Cambridge International Examinations, principals explored how best to engage and inspire the next generation of students for success in our changing world. This included discussion on how factors such as active learning, assessment for learning, study skills and metacognition are inter-related – and what this means for schools.

Speakers included Rana Mashhood Ahmad Khan, Minister for Education for the Government of the Punjab, Michael O'Sullivan, Chief Executive of Cambridge International Examinations and Peter Upton, Country Director of the British Council in Pakistan.

A Cambridge principal who attended the conference said: "It is a privilege to be here among top national educators, researchers, senior leaders and most of all, school principals. The conference programme covered

the essential elements of becoming lifelong learners in a very systematic way. I am sure delegates will take a lot of learning from this conference to improve the quality of learning at their schools."

Mr O'Sullivan said: "As educators our greatest concern will always be to help students learn better and learn more. One of the most effective ways to do this is to draw on well-established research evidence. Research tells us that the 'self-aware learner' is much better prepared for life after school and indeed for life after



The agenda included a panel discussion on '21st century Pakistan: Rules for schools'.



Clockwise from left: Rana Mashhood Ahmad Khan, Minister of Education, Punjab Province, Dr Lawrence Burke, Director Education, Beaconhouse School System and Scheherazade Asdar Ahmad, Founder and Principal, The Lyceum School.

university. At the conference we worked together to develop strategies that can be applied in the classroom to improve learning."

More than 560 schools offer Cambridge programmes and qualifications in Pakistan, including Cambridge O Level and Cambridge International AS & A Level.

## What every aspiring architect needs

Aspiring architects in England should be taking Maths at A Level and would also do well to consider Further Maths, according to a study of undergraduates.

Researchers Ellie Darlington and Jessica Bowyer surveyed a number of UK architecture students who said that mechanics had been the most useful area of maths they studied in sixth form. Mechanics, which involves the study of forces, has obvious uses in architecture but the researchers say that not all architecture students study it, and that some don't even study maths between 16 and 18.

A Level Maths and Further Maths are currently being reformed in England. The reformed qualification will make the study of mechanics compulsory, while the

new Further Maths will enable students to study mechanics further. The researchers say that it is vital that students are given appropriate advice when choosing what to study at sixth form, and that students should not just rely on the subjects that universities explicitly ask for.

*The Mathematics needs of prospective Architecture undergraduates* appears in the latest edition of *Research Matters*, international education provider Cambridge Assessment's biannual research publication.

The research it is based on is just a small part of the largest ever study of its kind into the maths needs of undergraduates.



## Assessment – what every teacher should know

More than 4,000 people from around the world have taken part in a webinar about understanding assessment.



Nahal Khabbazbashi and Evelina Galaczi from Cambridge English Language Assessment.

Evelina Galaczi and Nahal Khabbazbashi from Cambridge English Language Assessment said that validity, reliability and positive impact are the three key ingredients to a good test. They focused on the Cambridge English approach to language testing and explored the key concepts that help teachers to make better use of tests in the classroom. The researchers say that the viewing figures show that there is a huge appetite for this kind of information. *Understanding Assessment – what every teacher should know* is available to view on the YouTube channel [cambridgeenglishtv](https://www.youtube.com/channel/UCm3j8k8k8k8k8k8k8k8k8k8).

# How questions from the past are creating the physicists of tomorrow

A scheme to drive up the number of teenagers taking science, technology, engineering and maths (STEM) subjects is already paying dividends, a seminar has heard.

The University of Cambridge's *Isaac Physics* project exploits what is described as an "online treasure trove" of 17,000 exam questions from Cambridge Assessment's archives. Students can use the bank of questions – which dates back to 1858 – to enrich their learning, particularly ahead of exams and university admissions interviews.

Set up three years ago with a grant of nearly £7m from the Department for Education in England, the project is led by Cambridge University Professor of Theoretical Physics Mark Warner and Dr Lisa Jardine-Wright, Educational Outreach Officer at Cambridge's Cavendish Laboratory.

Prof Warner told a seminar hosted by Cambridge Assessment's training and development division, The Network, that the project has seen more than 2.6m exam questions answered by students across the UK and the world in this school year. Currently, 10,000 questions are being answered a day. A sister initiative, *Underground Mathematics*, is also enjoying similar take-up.

Prof Warner said the project had been founded partly to confront the decline in UK students taking STEM subjects at university, as well as increase access to higher education.

"My real interest is empowerment. We should think about outreach, where we try to get people into a subject, into university and into an academic discipline. An important and necessary part of that is raising aspiration and awareness. There are lots of ways of doing that, including this project. But students with these aspirations also need to be empowered to enter top (Russell Group) STEM universities. That is why they also need to develop physics analysis and mathematical tools."

Prof Warner said the scheme was not only proving popular with sixth form students, but with their teachers and parents. Teachers found it was useful in terms of professional development but also because it enabled them to test themselves and keep their skills fresh. The project is novel since it aims to halve teachers' work rather than double it, while the



Prof Mark Warner

associated Massive Open Online Course is free and associated books are available at cost price.

Thanking Prof Warner for his talk, Cambridge Assessment's Group Director of Assessment Research and Development Tim Oates said that the project was an outstanding example of beneficial linking between assessment and learning, increasing the range of pupils gaining access to deep learning in physics.



An enthusiastic audience included Julian Gilbey (left) from *Isaac Physics*' sister initiative *Underground Mathematics*.

## The Globe's the stage for English teachers

It is 400 years since the death of William Shakespeare and UK exam board OCR helped mark the anniversary with a conference for English teachers at the theatre that bears his name.

Shakespeare's Globe in London played host to a day of workshops for GCSE teachers on subjects including 'Fathers and Daughters in Shakespeare's Plays' and 'Researching and Teaching Reading'. The June event also included writer Kazuo Ishiguro – famous for books including *The Remains of the Day* and *Never Let Me Go* – in conversation with leading UK state school headteacher Geoff Barton.



Kazuo Ishiguro



Geoff Barton



The Globe Theatre

Students who specialise in STEM subjects at A Level are more likely to attend top UK universities, according to research.

By contrast, students who specialised in 'applied' or 'expressive' subjects – such as accounting, law, music and performing arts – were less likely to go on to study at a university that is part of the Russell Group of research-led UK universities.

Writing in *The effect of specialism and attainment in secondary school on the choice of Higher Education institution and field of study*, researchers Tom Sutch, Nadir Zanini and Carmen Vidal Rodeiro say that their findings will contribute to the debate about the role of subject choice in determining future career opportunities. While previous research has shown that students with a Russell Group degree tend to get better paid jobs, a non-Russell Group university may be a more appropriate choice for students in particular subject areas. The researchers say that the key issue is that students need to make informed choices.

Their study, which uses data from the Higher Education Statistics Agency, is published in *Research Matters*, international education provider Cambridge Assessment's biannual research publication.

The main focus of the research was to better understand how A Levels are used by students to progress to higher education. The researchers found the strongest link between A Level subject choice and university subject area was in medicine and dentistry, where the knowledge required means that students need to have specialised in science at A Level.

## A seminar to remember

How is learning limited by the brain's working memory? Dr Helen Abadzi of the University of Texas, USA, will be exploring the links between education theory and empirical work on cognition, memory and brain physiology at a forthcoming seminar: 'Memory biases and curricular illusions' on 20 October 2016.

Dr Abadzi, an expert in cognitive psychology and neuroscience with 27 years' experience as a senior educationalist at the World Bank, will present concepts of memory relevant to curriculum development, textbook use and testing, along with popular misconceptions.

This crucial area of educational theory is bound to generate lively discussion and rich debate. For more information and to book your place on this Cambridge Assessment Network seminar, go to [www.canetwork.org.uk](http://www.canetwork.org.uk).



Dr Helen Abadzi

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## CAMBRIDGE ASSESSMENT

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## Celebrity chef Heston cooks up a storm

More than 80 food teachers from around the UK have taken part in a workshop held by celebrity chef Heston Blumenthal.

The training day was put together to support teachers of UK exam board OCR's new GCSE in Food Preparation and Nutrition, which will be introduced into schools in September 2016. The qualification has been developed in partnership with the chef, who runs the Michelin-starred Fat Duck restaurant in Berkshire, England, and is famous for bringing science into the kitchen. A team from his restaurant and the Waitrose Cookery School in London helped deliver the training sessions and demonstrations, which ranged from culinary skills like fish filleting and making sauces to sensory analysis and food provenance. There were also practical sessions with teachers making steak tagliata or meringues.

Jade Watkins (pictured second left), from Cirencester Kingshill School in Gloucestershire, England, said: "I wanted to explore different ways of approaching the new GCSE to motivate myself and my students. Collectively, it's been a really inspiring day. The chefs are so passionate about ingredients and today has reminded me why I love my subject."

Celebrity chef Heston Blumenthal shows how to make steak tagliata at an OCR training day.



Tim Ellis, of Nottingham Girls' High School, said: "I came along today because I am new to teaching food and wanted to gain more experience of some of the skills involved. For me, the skills sessions on filleting fish and making sauces were the highlights. It's great to be able to ask questions, which you can't do when you just watch a video."

And Joy Witting (pictured second right) of Charters School in Sunningdale, Berkshire, said: "I wanted to find out more about the specification and find lots of inspiration to take back to the classroom. The practical sessions today were great, just what I needed to keep my students enthusiastic."

## Cambridge Mathematics one year on

A five-year project to develop a framework that will help support world-class mathematics education for students aged from five to 19 has celebrated its first birthday.

The Cambridge Mathematics Framework project is a cross-University collaboration involving the Faculty of Maths, Cambridge University Press, the Faculty of Education and Cambridge Assessment. To mark the first year, community members came together to hear the latest updates on the programme and share news of their own projects, including the publication of a new book, *Teaching Probability* by Cambridge University Professor David Spiegelhalter.

The maths education community both internationally and in the UK continues to be invited to contribute to the project. To learn more about Cambridge Mathematics visit the website or get in touch at [info@cambridgemaths.org](mailto:info@cambridgemaths.org).



The Cambridge Mathematics team