

# HIGHER EDUCATION bulletin

SPRING 2015



IN THIS ISSUE:

**POSITIVE  
ABOUT SCIENCE  
PRACTICALS**

**INSIDE TRACK  
ON ALCAB**

**CO-TEACHABILITY:  
KEY TO AS**

**SOCIAL MEDIA  
IN A LEVEL  
BUSINESS**

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**OCR**  
Oxford Cambridge and RSA

# Spring 2015 issue



# 3

## News in Brief



# 4

## Policy Update



# 7

## Positive about Practicals



# 8

## Co-teachability: key to AS



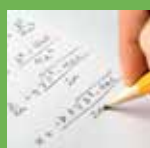
# 10

## In conversation with Isabel Nisbet, ALCAB



# 12

## Spotlight on new A Levels



# 14

## A manifesto for Cambridge Maths

# Welcome

## Welcome to the spring issue of HE Bulletin.

As we approach May and the general election, the intentions of the political parties are being made clear, and education, as always is very much at the fore. On pages 4-5 we set out what each party is saying on school education and without crystal-ball gazing as to who will come to power in May, it is clear that the expansion of different schools types, funding and teacher quality is key to all parties. Of particular interest to OCR is whether we will see a halt, as proposed by the Labour Party, to the current programme of qualification reform.

Following the publication by UCAS of their 'Unpacking Qualification Reform Report' which reveals a very mixed picture of take up of the new standalone AS qualifications, we wanted to inform you about the co-teachability of new AS and A Levels, a dimension that hasn't been touched on much to date and could well influence schools and colleges in their decisions for teaching AS. OCR has designed all its new AS qualifications to be co-teachable with its new A Levels.

As we go to print we await two announcements from Ofqual, the exam regulator – one on the Completing GCSE and A Level Reform consultation which will set out final decisions on which subjects will carry the GCSE and A Level title. In anticipation, OCR has set out the subjects it would like to continue to offer on page 6. The second announcement is on practical science assessment within GCSE sciences. On page 7 we talk about our approach to science practical assessment and give an update on the pilot we have carried out with schools which supports the separate reporting of practical science in a certificate of endorsement.

Isabel Nisbet who has overseen the A Level Content Advisory Board which was established to review A Levels, shares her reflections on the process and lessons learnt on pages 10.

We showcase the new business and economics A Levels in our Spotlight on A Levels. Central to both has been the increase in maths content, in particular, quantitative skills. The increase in mathematical content has been a key component of A Level and GCSE reform and has been, in part, due to a sense amongst HE that students wishing to study subjects such as law, economics and psychology are often lacking in their knowledge and practice of maths skills, many having not studied maths since the age of 16. On page 14, Lynne McClure, Director of Cambridge Mathematics, sets out the Cambridge Manifesto for Mathematics.

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

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# News in brief

## The extended project qualification supporting widening participation

In February, OCR hosted its first subject consultative forum for the Extended Project Qualification (EPQ), attended by over 25 members from higher education, schools and colleges and charitable organisations such as the Wellcome Trust, and with presentations from students.

There has been a year-on-year increase in take up of the EPQ since 2008 and there are some indications that this rise may increase substantially as a consequence of qualification reform. The forum asked some key questions about what the true value of the EPQ is and how we can extend the take up of EPQ to those students who may not consider it an option.

In looking at the statistics of entries for EPQ over its five year history some interesting issues emerge. The take up ratio of females and males has remained constant with a 60/40 split, an 81% rise in entries from the Independent school sector compared with 41% for state schools and a very clear difference in geographical spread with the South East having the most entries and the North East the least.

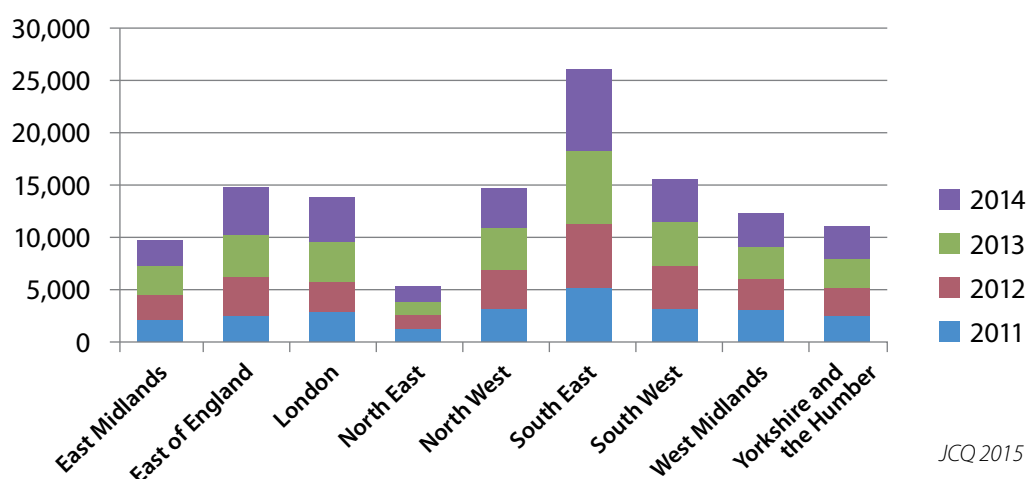
UCAS in its 'Unpacking Qualifications Reform'<sup>1</sup> reports that the most common offer from independent schools who responded to their survey is to offer three A Levels with an extended project qualification. OCR is keen to explore the options of widening the take up of EPQ. OCR is currently working with a number of

universities and their widening participation (WP) leads. We are exploring WP programmes run for students to see if aspects of the courses equate to the taught requirement of the EPQ, for example, research skills and extended writing, and whether the students are able to submit work carried out within their programmes as an EPQ. We are

also exploring the possibility of developing joint resources for teachers and students. We know there are some exciting programmes that exist and we would very much like to hear from you and your colleagues if this is of interest.

For more information, contact [Sally.Brown@ocr.org.uk](mailto:Sally.Brown@ocr.org.uk).

Take up of EPQ by region 2011-2014



JCQ 2015

## OCR seeks international recognition

OCR is launching its technical and professional qualifications at Level 3 internationally. OCR Head of International Projects, Dominique Slade, commented: "Growing international demand for high quality vocational qualifications such as Cambridge Technicals clearly indicates that finding solutions for the skills race is a truly global issue."

Following the successful introduction of Cambridge Technicals in Mauritius, OCR is now working with a pilot school in Zimbabwe. Recognition from in-country qualification agencies is needed to support students progression to university. OCR is currently working with South Africa Qualifications Agency (SAQA) and Higher Education South Africa (HESA) to seek recognition.

## OCR continues to support students towards their studies at higher education

Each year, OCR offers a limited number of bursaries, worth £3000 per year, to Cambridge University students from the West Midlands.

2015 is the twelfth successive year of OCR's West Midlands bursary scheme, which aims to help gifted students make the most of their time studying at Cambridge and lessen any financial concerns they may have. Bursary funds are paid directly to the college, and students can choose whether they are used on living costs, tuition fees or a combination of both.

The award fund comes from OCR's historical association with the West Midlands Exam board, and previous years have seen talented recipients studying a range of different subjects benefiting from this extra support.

Application forms are available from OCR's website <http://www.ocr.org.uk/news/view/ocr-bursary-scheme-now-open-for-applications/>

<sup>1</sup> UCAS Unpacking Qualification Reform Report January 2015

# Policy Update

## ELECTION COUNTDOWN

Countdown to the General Election on 7 May 2015 is well underway with all political parties setting out their stalls. Education as always features heavily and below is a summary of who is saying what and how it may leave the school educational landscape after May. Not surprisingly, key common themes include funding, teacher quality and the curriculum.



### Conservative Party

David Cameron has announced that he plans to “turbo-charge” the Conservative Party’s education policy.

- **Funding** A pledge to ring fence spending on primary and secondary education until 2020 was given followed by a subsequent announcement that the Conservatives could not promise to “inflation-proof” education funding. English schools could therefore face a budget cut of an estimated 10% in real terms during the next parliament.
- **Teacher quality and accountability** All primary and secondary schools rated as “requiring improvement” or “inadequate” by Ofsted could be given new leadership and converted to academies. The proposal, which would affect one in five of the country’s 20,000 schools and about one million students, will be part of the Conservatives’ manifesto at the general election. Other policies announced include the creation of a specialist college for teaching and greater use of big data to use for accountability measures.
- **Reform and the three Rs** A determination to place knowledge at the core has emerged:
  - The current programme of reform to qualifications both academic and vocational for 14-19 year olds will be continued.
  - Students who leave school with GCSE grades less than a ‘C’ in English and maths will be required to continue studying both subjects until 19.
  - A new emphasis on the “three Rs” of reading, writing and arithmetic - all children leaving primary school should know their times tables and be able to read a novel and write a short story.
- **Schools Landscape** A commitment to open 500 more Free schools



### Labour Party

- **Funding** A pledge to increase spending on education by at least the rate of inflation had been given.

The Department for Education’s £58bn budget would be protected, including for 16-19 year olds.

- **Classroom size** Infant Schools with class sizes of more than 30 would be given 12 months to reduce numbers, by hiring additional teachers if necessary, with the money to pay for it coming from the free schools budget.
- **Teacher Quality** A fully-qualified profession with regular CPD and revalidation of expertise has been promised, as well as a Directors of School standards to oversee local accountability and performance, and Academy freedoms extended to all Headteachers.
- **Reform** Confirmation that, if elected, the AS and A2 will be re-coupled. In the interim, current A Levels will continue, i.e. the implementation of reformed A Levels in schools in September 2015 will not go ahead;
  - Commitment to the development of a 14-19 National Baccalaureate (comprising English, maths, personal development, extended writing/research activity (EPQ)). Acknowledgment that this will be a long term project that will require cross-party consensus and will be developed in partnership with all stakeholders. The first step will be a Technical Baccalaureate but this will be part of the wider 14-19 system.
  - Compulsory work experience from age 14
  - A refocusing on the arts and creative subjects and character education taught to all.
  - All young people will study English and maths to the age of 18
  - A guarantee of an Apprenticeship place for any school leaver.







### Liberal Democrats

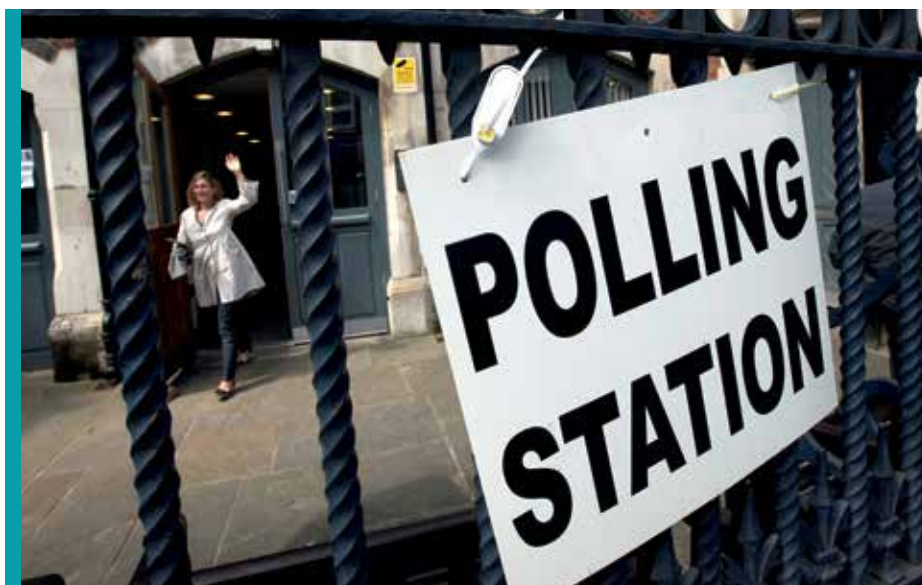
- Protection for education funding from cradle to college and ensure that this extra funding supports high attainment and gap narrowing.
- Support for all disadvantaged pupils through the pupil premium.
- Support for the College of Teaching and a focus on school leadership through expansion of the Talented Leader's programme and a doubling of numbers of leaders being paid with an addition to their regular salary.
- A pledge to end illiteracy.
- Establish an Education Standards Authority to reduce political interference in education, independent of the Department for Education, which would be charged with assessing changes in standards and performance over time and overseeing the detailed development of curricula.



### Green Party

The Green Party's manifesto makes a number of wide-ranging promises around education:

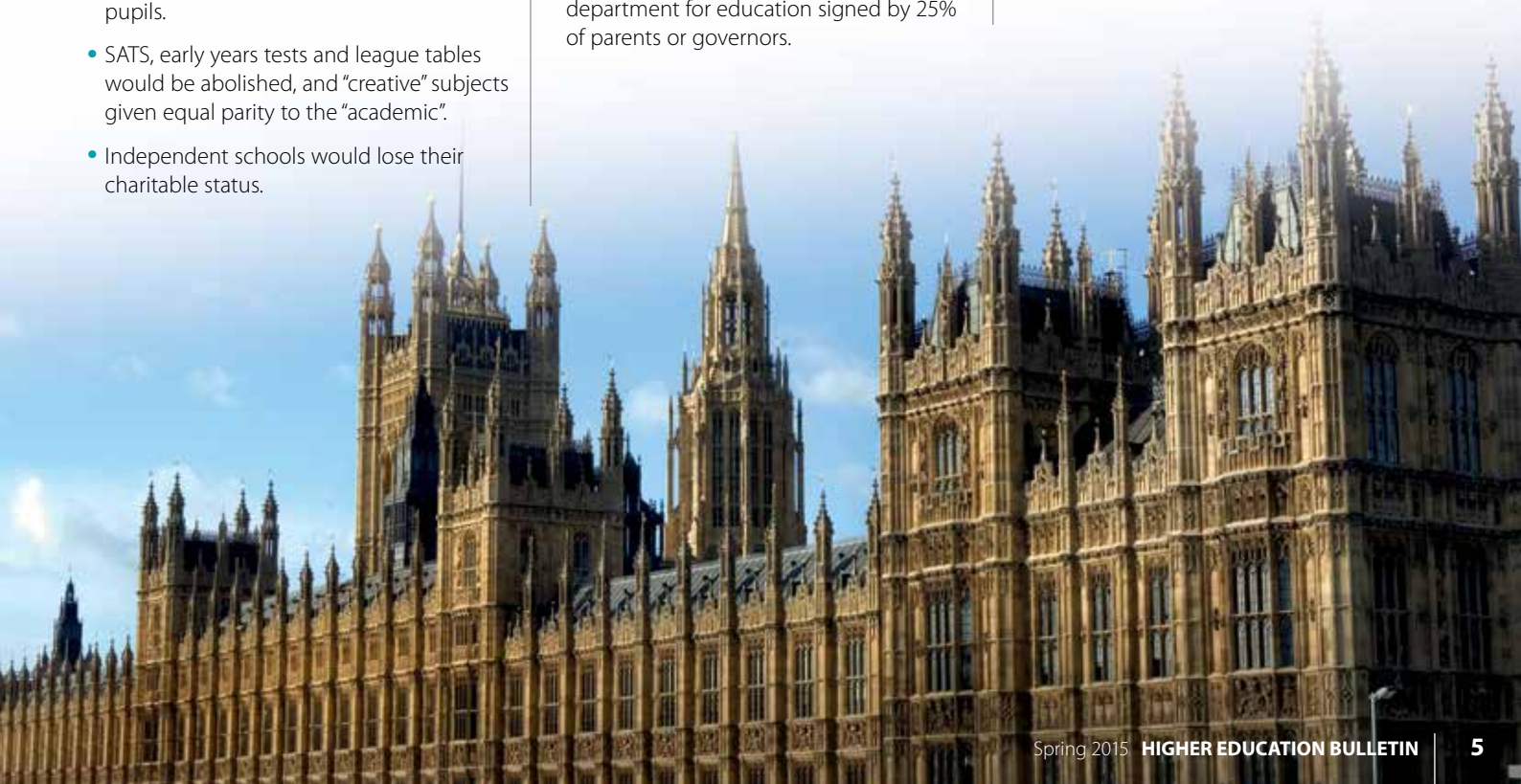
- Large schools would be broken up and schools would have no more than 700 pupils.
- SATS, early years tests and league tables would be abolished, and "creative" subjects given equal parity to the "academic".
- Independent schools would lose their charitable status.



### UKIP

- An option for students to take an Apprenticeship qualification instead of four non-core GCSEs will be introduced which can be continued at A Level.
- The 50% target of school leavers going to university will be scrapped.
- The principle of Free Schools that are open to the whole community and uphold British values will be supported.
- Existing schools will be able to apply to become Grammar schools and select according to ability and aptitude.
- Schools will be inspected by OFSTED on the presentation of a petition to the department for education signed by 25% of parents or governors.

The real difference between the Labour party and the Conservative party is that Labour would halt the current roll out of qualification reform. All parties agree a greater focus is needed on the teaching profession, current figures suggest 1 in 12 teachers and 25% of senior leaders are currently leaving the profession, but funding remains the critical point.



# Qualification Reform

**“Will the narrowing of a subject choice have an impact on entries to higher education?”**



As consultations on qualification reform draw to a conclusion, Ofqual has issued Part 1 of a two-part response to its consultation on Completing GCSE and A Level Reform and has made its decision around those subjects that will no longer be offered, namely:

- AS and A Levels in applied art and design
- AS and A Levels in applied business
- AS and A Levels in human biology
- AS and A Level in economics and business (combined course)
- GCSE digital communication.

Examination boards have been asked by Ofqual to submit the qualifications they will be taking forward for development in the third and final tranche of GCSE and A Levels. Reasons for continuation or not, are based on a number of factors including internal subject expertise, historic offerings and number of entries.

Decisions about what subject titles will exist at GCSE and at A Level are beginning to generate debate. Why will there no longer be an Anthropology A Level, and shouldn't there be a GCSE in philosophy, are some of the concerns being voiced. Will the narrowing of a subject choice have an impact on entries to higher

OCR has announced the GCSE and A Level qualifications it intends to submit to Ofqual:

GCSE	AS and A Levels
<b>Ancient history</b> <b>Biblical hebrew</b> <b>Business</b> <b>Classical civilisation</b> <b>Design and technology</b> <b>Economics</b> <b>Environmental and land based studies</b> <b>Health and social care</b> <b>ICT</b> <b>Media studies</b> <b>Psychology</b> <b>Sociology</b> <b>Statistics</b>	<b>Ancient history</b> <b>Classical civilisation</b> <b>Critical thinking (AS only)</b> <b>Design and technology</b> <b>Film studies</b> <b>Geology</b> <b>Government and politics</b> <b>Health and social care</b> <b>ICT</b> <b>Law</b> <b>Maths</b> <b>Further maths</b> <b>Media studies</b>

education? Is it right that the curriculum is more varied at HE? Are there other avenues where these subjects could be explored? We would be very interested to hear your views.



# Positive about Practicals

**The practical endorsement certificate for science will be reported separately and does not count towards the A Level, however at least 15% of marks available on questions papers for new science A Levels will be based on practical skills.**

*Steve Jones, Director of CLEAPSS, spoke at OCR's Royal Institution launch*

In the Summer 2014 edition of HE Bulletin, we set out the requirements for the Practical Endorsement certificate that supports the new A Levels in biology, physics and chemistry due to be taught from September 2015.

Concern has been raised by the science community and some higher education academics such as Sir David Bell, Vice Chancellor of University of Reading, about their fears that practical work could be lost altogether in schools because it is not assessed. The Secretary of State for Education, Nicky Morgan MP, has also expressed her concern in a ministerial speech in January 2015.

The assessment of practicals in science is something OCR has long campaigned about. In 2013, a report authored by Tim Oates, Group Director of Assessment, Research and Development at Cambridge Assessment, called for an end to the practice of coursework marks contributing to final results as this puts strain on teachers, pupils and parents, does not assess what it set out to assess and encourages superficial learning. Based on this research and on teacher feedback, OCR believes Practical Endorsement for the new A Levels in biology, chemistry and physics will be an improvement on controlled assessment in several ways: increasing the amount of practical work by students (a minimum of 12 experiments per subject will be assessed, whereas that can be as low as four currently); changing to assessment that assesses a full two-year course; making achievement (a Pass or Fail) visible for the first time; and engendering a deeper understanding of science through greater experimentation.

The Practical Endorsement is focussed around encouraging a wide range of practical activity in centres and developing skills in practical work. It is intended that by carrying out a

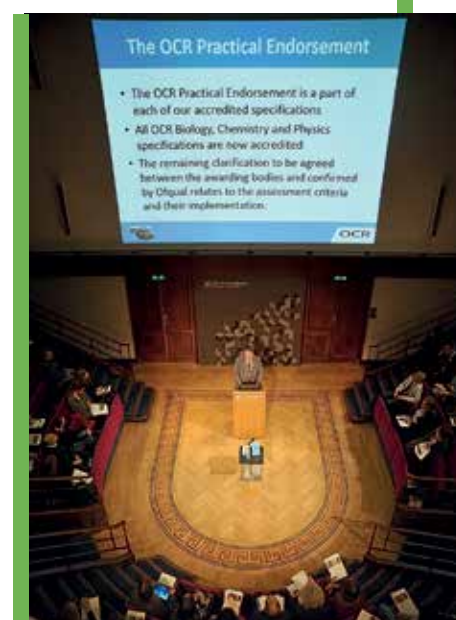
set minimum number of practical activities, students acquire a level of competence in practical work which is rewarded within the Practical Endorsement while aspects of their understanding of practicals are assessed within written papers. Essentially, this requires students to think more about the practical activity and go beyond instruction following but also requires teachers to provide exposure to a wide range of practical activity during the course.

A joint trial of the new approach to practicals has been carried out by four examination boards, A Level teachers and students from 22 schools and colleges around the country. Those who took part in the cross-board trial responded enthusiastically. A video of trial feedback is now available at [www.ocr.org.uk/PositiveAboutPractical](http://www.ocr.org.uk/PositiveAboutPractical).

Trial participant Sarah Baldwin, A Level Chemistry Co-ordinator at Truro FE College, said: "This new practical portfolio really opens up science. Students will get more skills as it offers far more flexibility and breadth... It allows for more in-depth tasks and for much more research and discussion. It will therefore be far more useful for industry and HE."

Another teacher involved in the trial, Stuart Worth, Head of Science at Kent College, Canterbury, commented: "My school has had a very positive response to the trials. It's easier to handle, is much more relaxed, it's over a long time period, and skills can be gathered slowly."

The response from students in the cross-board trial was also positive. Olivia Portess, 17, of William Farr Comprehensive School, Lincoln, said: "It's about a learning curve over time and making you into a better scientist, rather than just about getting a good mark on the day." Fellow pupil, Ahmad Sultan, 16,



added: "This new way of doing practicals will also help you be prepared for university. You don't start off fully confident. Doing several [practicals] throughout the year, keeping track and seeing how to improve is better than having the pressure of just doing one big project."

To support its position, OCR recently held a symposium 'Positive about Practical' at the Royal Institution. Steve Jones, Director of CLEAPSS (Consortium of Local Education Authorities for the Provision of Science Services), who spoke at OCR's Royal Institution launch said: "We have to be honest about previous attempts to assess practical aspects of science and reconnect with the real reasons for doing practical work with pupils."

To find out more about OCR's Positive about Practical campaign visit [www.ocr.org.uk/PositiveAboutPractical](http://www.ocr.org.uk/PositiveAboutPractical).

# Co-teachability

## is key for new AS qualifications

The recent UCAS report 'Unpacking Qualification Reform'<sup>i</sup> reveals information and differing approaches to the introduction of new A Levels in September 2015.

**"The new 'standalone' AS Level is in danger of being seen as a totally new and different qualification."**

The report suggests some conclusions can be drawn, for example, by school type, with independent schools opting to take three A Levels and an Extended Project Qualification (EPQ) and state schools maintaining the four AS, three A Levels model. Explanations for this include: destination intentions of the cohort; differing abilities and school ethos and purpose; but it does raise some concern about what this will do to achievement.

The report also suggests that both schools and higher education institutions need to be as clear as possible in their intentions. Universities should publish qualification reform statements and schools should declare their rationale for choosing to offer AS or not. This could lead to questions on what is seen to have more value – the standalone AS, the EPQ, or other qualifications at level 3. This, in turn, raises concerns about fairness and access.

What is missing from the debate, perhaps because of the terminology of 'standalone' AS Levels, is co-teachability. The new 'standalone' AS Level is in danger of being seen as a totally new and different qualification. Whilst it is true that the AS will not count towards the final grade of an A Level, it does in fact, continue to be a subset of the reformed linear A Level.

Co-teachability means that both the reformed AS and reformed A Level can be taught together as they are currently, i.e. up until the point of AS examinations, because:

- the content of the new AS qualification is a subset of the A Level content and can be taught together;

- there is a shared vision for both AS and A Level qualifications; and
- the assessment objectives, aims, outcomes and requirements for synoptic learning are the same at AS and A Level.

This brings several advantages. It allows students the choice of:

- just taking the AS qualification;
- deciding not to take the AS qualification but proceed onto the full A Level; or
- doing both – taking the AS and the A Level but recognising that they will be reassessed on their AS content at a higher standard when they take the A Level assessment/s.

In collaboration with experts from across the education community, including HE and employers, OCR has created new co-teachable AS qualifications in all first tranche subjects<sup>ii</sup> that enable schools and colleges to continue to deliver them within linear A Level programmes.

Listening to and seeking views from our stakeholders, OCR shares the concerns raised within the UCAS' report such as possible lower take up of A Levels, lack of feedback for students, narrowing of the curriculum through lower take up in certain subjects and the loss of predicted grades in university admissions. A greater understanding of co-teachability brings benefits to all stakeholders:

- In a recent survey with the National Union of Students<sup>iii</sup>, seven in ten students agreed or strongly agreed that age 16 is too early to make subject choices that

could define their career path. 61% felt the lack of feedback from AS results would pose a problem in making rational decisions about which course and universities to apply for.

- Co-teachable AS qualifications mean schools and colleges will be able to continue to deliver a broad subject offer and students will be able to continue to take four subjects<sup>iv</sup>, and choose whether to take the AS qualification.

Historically, we know that certain subject areas such as psychology, economics, music and modern foreign languages saw substantial growth when AS was introduced. These could be the same subjects that lose student numbers when new A Levels are introduced. Some other subjects may also see uptake differ between genders. Could the year-on-year increase in the number of girls taking maths be reversed as a consequence of reform? Co-teachability could go some way to preventing such subject trends.

Co-teachable AS qualifications also help maintain the rationale for the introduction of AS in Curriculum 2000 when too many students were leaving school at age 17 with no qualifications at all. At the inception of Curriculum 2000 the average number of A Levels studied was just two. The intention was to ensure that students took more than three subjects thereby deferring narrow specialisation.

Co-teachability will allow students who feel they are unlikely to achieve the full A Level qualification at the end of their two year A Level programme, to opt to take the





AS qualification only. This will ensure that students on two programmes have a step off qualification.

On a practical level, co-teachability will be helpful to schools and colleges during the two years from 2015 to 2017 when both old and new A Levels exist in a 'mixed economy' of A Level qualifications and where funding is an issue. It also provides universities with actual grade attainment at AS, if taken in Year 12, and helps address the fear that the HE sector has expressed that teachers have reached a 'record level of optimism in prediction of grades.'

It is however important to note that Ofqual, the qualifications regulator, has stated that no non-examined assessment (coursework) will take place at AS. This doesn't mean that important skills will not be developed while students undertake the AS but they will not be assessed on these skills. For some subjects, such as the sciences, this will mean that students who take AS qualifications in science will not get a Practical Endorsement certificate.

In conclusion, OCR believes that making our new A Levels co-teachable addresses some of the real concerns raised by students, schools, colleges and HE.

## IN PRACTICE: ENGLISH LITERATURE A LEVEL

The OCR AS and A Level English Literature qualifications have been deliberately structured so that students are able to follow the same scheme of learning. For example, the Shakespeare set texts for AS English Literature exam 1 are the same as those set for Section 1 of exam 1 at A Level, and the poetry set texts for AS are

the same as those set for section 2 at A Level. The prose texts set for AS exam 2 are also set as choices on exam 2 of the A Level and the topic areas are the same. Similarly the post-1900 drama texts set for AS exam 2 may be studied by candidates preparing for the non-examined assessment component for A Level.

English Literature A Level	English Literature AS Level
<b>Exam 1:</b> Drama and Poetry Pre 1900 Shakespeare Drama and Poetry Pre 1900 (Closed text)	<b>Exam 1:</b> Drama and Poetry Pre 1900 Shakespeare Drama and Poetry Pre 1900 (closed text)
<b>Exam 2:</b> Comparative and Contextual Study Close reading (unseen) Comparative and Contextual Essay (Closed text)	<b>Exam 2:</b> Drama and Prose Post 1900 Drama Post 1900 Prose Post 1900 (Closed text)
<b>Non-examined assessment component:</b> Literature Post 1900 Critical piece OR recreative piece with commentary	

<sup>i</sup> *Unpacking Qualification Reform Results of the UCAS survey on A Level reform – UCAS January 2015*

<sup>ii</sup> *Art and Design, Business, Computer Science, Economics, English Literature, English language, English Literature and Language, History, Science (Physics, Psychology, Biology and Chemistry), Sociology*

<sup>iii</sup> *OCR/NUS student survey 2014*

<sup>iv</sup> *Other factors may limit this depending on school type, school /student preferences or funding arrangements*

# In conversation

*Isabel Nisbet, the Executive Director of the **A Level Content Advisory Board (ALCAB)** (April 2014 – March 2015), provides some reflections on the role of ALCAB in current A Level reform.*

**Isabel has a long record of involvement with qualifications. Isabel was the first Chief Executive Officer of Ofqual, the regulator of qualifications and examinations in England. From 2011-2014 she worked for Cambridge International Examinations as Regional Director of Education for South East Asia based in Singapore.**

## Can you give a bit of background to ALCAB?

In 2013, the Government invited the Russell Group of universities to advise on the design and development of the content of A Levels (for use in England) in the subjects designated by the Russell Group as “facilitating subjects”. While the universities were considering this invitation, the Government’s reform clock was ticking, so a committee of exam board representatives, chaired by Professor Mark Smith of Lancaster University, was set up to review a clutch of A Levels to see whether they could be taught and examined in the new linear format, with first teaching from 2015. During and after the Committee’s work, three subjects were identified as requiring significant review: mathematics (including further maths), modern languages (to which classical languages were added later) and geography.

The Russell Group set up a small, independent company to advise on the content of A Levels in these three subjects, and Government agreed to fund that activity. Thus was born ALCAB – the A Level Content Advisory Board. It set up three subject panels to review the content of A Levels in the three subjects and I was appointed its Executive Director in April 2014. The panels included some of the top experts in their subjects. The total cost of the entire exercise will come out at less than £500k.

A common theme of the ALCAB reports was that A Level should be the beginning of an experience of the essence of the subject studied – what it is like to be a



**Isabel Nisbet**  
Executive Director, ALCAB

**“The A Level is a strong qualification. It wasn’t broken and didn’t need to be ‘fixed’. The new A Levels will be successful if they enable young people to experience the excitement and richness of learning.”**

mathematician, a linguist or a geographer. It should not be just a recycling of topics already studied at GCSE or the reproduction of memorised processes and techniques.

## What do you believe have been the successes of the ALCAB process?

The experience of bringing university subject experts together and engaging with A Levels was very positive. The academics wanted to help, they learned a lot about A Levels and they added real value. The panel membership was not confined to the Russell Group and the panels took an inclusive approach, consulting widely. They also gained from working together – and with the subject specialists from the exam boards.

## Are there aspects that were less successful or difficult?

It’s a pity that it took the universities so long to respond to the Government’s initial invitation in 2013. It is likely that one or two important subjects which the exam boards, under Professor Mark Smith, deemed fit to be offered in the new format, would have benefitted from deeper work by ALCAB.

There were one or two school/college teachers in the ALCAB panels but, with hindsight, it would have been better to have had more. The academics were not able to judge the practicalities of what could be taught in a set number of periods or, more widely, the impact of their recommendations on what would happen in the classroom.

The whole exercise was founded on a shaky premise – that it is possible to allocate review



of content to one set of people and review of assessment to another. In practice, the two are inextricably linked – the assessment arrangements feed back into what is taught and the subject experts have legitimate views on the most valid way to assess their recommended content.

Also, some of the high level policy decisions about A Levels, which ALCAB had to accept as “given”, seemed rather alien to the panel members. For example, some subject experts – particularly mathematicians – prefer modular to terminal structures and many modern university degrees are based on modular assessment. The panels also felt strongly that the AS qualification was valuable, and they hoped that it would survive, despite “decoupling”.

A lesson from the ALCAB experience is that academics working together are more effective than experts scattered across the system.

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

There is no question that the high point of the exercise for me was the opportunity to work with some of the brightest people in the country, and get an insight into their love for their subject and an update on practice in today’s universities. The experience also opened my eyes to the difficulty the universities had in engaging with the edu-politics of the school sector. As a former queen bee of assessment, I also benefitted from working more on curricular matters, and I saw how curricular and assessment considerations need to be balanced in making decisions that will be good for education.

#### **What for you would be an indication of success as a result of A Level reform?**

The A Level is a strong qualification. It wasn’t broken, and didn’t need to be “fixed”. The new A Levels will be successful if they enable young people to experience the excitement and richness of learning. A positive indicator would be feedback from students who had progressed from the new A Levels to HE or employment judging that they found their A Level study useful.

A short-term success indicator for the subjects reviewed by ALCAB would be whether the first syllabuses and exams reflect the philosophy and vision of the ALCAB recommendations. It is too early in the development process to judge that now.

At system level, the system should support young people in making the right subject choices. It should also support an educational experience that will be of lasting value to them.

#### **What do you see as the future for university/school/exam board collaboration?**

I’m cautiously optimistic. I know that the members of the ALCAB panels were very committed to helping improve A Levels. The many exchanges of emails in the early hours of the morning attest to that. I hope that schools and colleges will make contact with the subject academics in their local universities and that exam boards will continue to work with them.

I think the greatest danger is fragmentation of expertise. As a former government

official and regulator I know that in the past, the frequency of disagreements among the expert groups within the same subject meant that they cancelled each other out and there was too much power for a small number of individuals in the central organisations to shape changes to qualifications.

As far as ALCAB is concerned, it is possible that a future Government might come back to it to seek combined university input into the review of examinations in the subjects on which we reported – or other “facilitating subjects” – but that would be some years ahead, and for the time being ALCAB is closing down.

#### **What would be your key messages to 16 year olds deciding on what A Levels to study?**

I hope that it will be possible for young people to delay their choice beyond the age of 16, for example by taking AS Levels if they are available. But the most important advice is to follow your passion. If you are inspired to go beyond the curriculum and take up opportunities, through the internet or extra-curricular activities, to explore your subject in greater depth, that will be the best preparation for university or employment.



# Spotlight on new A Levels

We continue our series on the newly developed A Levels for first teaching in September 2015.



## THE ROLE OF SOCIAL MEDIA AS A BUSINESS TOOL: INTRODUCING THE NEW OCR BUSINESS A LEVEL

For students of the new OCR A Level in Business, the study of social media as a business tool will become an essential part of the course. This will be one of a number of new topics aimed at ensuring A Level Business reflects recent developments in Business.

Other topics include how marketing strategies have adapted with changes in technology. Students will be able to draw on both their subject knowledge and personal experiences to consider the

value of email marketing campaigns from the point of view of the recipient and the sender. Students will also consider changes to where goods are sold and distributed. The annual average weekly spending online through retailers in Great Britain in 2014 was £718.7 million. This amount has more than doubled in the last five years. Marketing terms such as 'Black Friday' and 'Cyber Monday' have been used to great effect to fuel this growth at key times of the year. Their use has spread to many countries across the world. Students will have the opportunity to study these developments and their implications for businesses as part of their course.

Greater prominence will be given to maths and quantitative skills across all new GCSE and A Level subjects. A Level Business has always included some quantitative skills particularly within the area of accounting. The new AS and A Level Business qualification has a minimum of 10% quantitative assessment. Included will be calculations of ratios, averages and percentage changes alongside the interpretation and analysis of information in graphical and numerical forms. There will also be an understanding of normal distribution, standard deviation and consideration of its usefulness to a business and its stakeholders.

The new A Level draws on the strengths of the previous specification. OCR continues to offer familiar topics within the functional areas of business: accounting; people; marketing; and operations. Central to both the AS and A Level qualifications will be developing the knowledge





and understanding of the key aspects of business decision-making and the impacts these have on the business and its stakeholders. This will provide a strong foundation for those students who wish to pursue further study in business or related work. At the same time they offer complete courses for those who are simply interested in achieving a greater understanding of what they see in the news and the world around them.

Assessment comprises three two-hour examinations at the end of the A Level, with the AS having two examinations of one and a half hours each. Each component comprises synoptic assessment, so students will have a holistic learning experience. For those centres that are planning to teach the A Level without the AS, the assessment burden has been reduced.

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

Component Title
<b>Component 1</b> Operating in a local business environment
<b>Component 2</b> The UK business environment
<b>Component 3</b> The global business environment

## THE CONCEPT OF MARGIN AND THE EASTERLIN PARADOX: INTRODUCING A LEVEL ECONOMICS

Encouraging students to think as economists within a global context, its relevance to the modern world and their role within society are all central to OCR's new A Level economics.

Economics is a challenging contemporary subject which is becoming increasingly popular, with entry numbers almost doubled in the past 10 years. The number of students taking economics at AS in 2014 was nearly 44,000 with over 26,000 going on to take the subject at A Level. Economics is the 11th most popular A Level subject (JCQ 2014).

In order to bring the new specification in line with stakeholder expectations, the redevelopment work included evidence from our Economics Consultative Forum and research undertaken by our parent organisation, Cambridge Assessment. One of the main areas addressed was the explicit requirement for the assessment of quantitative skills.

The Higher Education Academy (HEA) Science, Technology, Engineering and Mathematics (STEM) project highlighted mathematics-related issues encountered by students at the transition from pre-university to degree programmes in several disciplines, including economics. Although many universities are likely to require

A Level maths for economics courses and over 70% of students start their economics programme with A2 Mathematics, 80% of students stated there was much more mathematics involved in their economics degree programme than they expected. So for some time there has been concern about the mathematical and statistical skills of undergraduate students embarking on degree courses in economics. Hence the decision was widely welcomed that quantitative skills will be a minimum of 15% of the overall AS marks and a minimum of 20% of the overall A Level marks of the reformed economics A Level.

The new specifications have 60% specified content allowing examination boards to develop a further 40%. OCR has consulted widely with its stakeholders from HE, schools and colleges and learned societies to develop its additional content. In microeconomics there is now more focus on aspects of, for example, the concept of the margin, corporate social responsibility or cost-benefit analysis. Macroeconomic topics now include alternative measures to economic performance, the Easterlin Paradox or the National Well-being programme, as well as international and global economics, sustainability, financial markets and regulation and the role of central banks.

Component Title	
<b>Component 1</b> Microeconomics	From a base of microeconomic theory, this component enables learners to discuss and evaluate how well microeconomic theories explain our observations of economic agents in the real world.
<b>Component 2</b> Macroeconomics	This component provides learners with the technical and analytical tools required to understand how the macro economy functions on both a domestic and global level. The content of this component encourages learners to adopt a critical approach to their study of policy through a development of their understanding of the limitations and conflicts which macroeconomic policies cause.
<b>Component 3</b> (A Level only) Themes in Economics	The assessment of this component will be fully synoptic in nature and draws together both microeconomic and macroeconomic concepts in relation to a specific unseen theme.

All components are assessed entirely through written examinations with a balanced set of short, medium and extended response questions that are externally marked.

# A manifesto for Cambridge Maths

**This month sees the launch of Cambridge Mathematics – a collaborative enterprise between four Cambridge University partners: the Faculty of Mathematics; the Faculty of Education; Cambridge Assessment; and Cambridge University Press.**



**Lynne McClure**  
Head of Cambridge  
Mathematics

The four partners are committed to championing and securing a world class mathematics education for all students from 5-19 years old, applicable to both national and international contexts and based on evidence from research and practice. The project is headed up by Lynne McClure. Lynne formerly directed the NRICH project, based in Cambridge University's Centre for Mathematical Sciences.

"The study of maths is worthwhile for its own sake, but it is critical for the understanding of many other subjects and essential for functioning within modern society," Lynne said.

The partnership is clear that Cambridge Mathematics is needed for a host of reasons, including the poor performance of England in international comparisons, the low level of uptake of maths after 16 in the UK, and the "seemingly intransigent" low UK levels of adult numeracy. It also points to the shortage of maths teachers in the UK and a disconnect between the maths taught in classrooms and advances in maths understanding. However Cambridge Mathematics will have an international as well as a national reach.

The framework aims and elements of Cambridge mathematics are set out in the Cambridge Mathematics manifesto <http://www.cambridgeassessment.org.uk/Images/cambridge-mathematics-manifesto.pdf>

The four integrated elements of Cambridge Mathematics are:

- the Cambridge Mathematics Framework – the content spine to which the other elements will link

- resources – both paper based and electronic
- a coherent formative and summative assessment offer
- a professional development framework encompassing both subject and pedagogical knowledge.

The Framework will:

- be a map of the full domain of mathematical knowledge from pre-school to the end of the upper secondary phase of education and training arrangements
- be loosely age-related and based on progressions in organising concepts and principles
- be the basis for different curriculum pathways which will flesh out a more detailed hierarchy
- be a basis for deriving standards
- be illustrated by indicative content and exemplar performances
- be evidenced both from the study of a range of mathematics curricula and mathematics assessments, and from a theoretical perspective of conceptual progression
- allow for the description of skills and dispositions necessary for effective use of mathematics.

If you are interested in finding out more please contact [enquiries@cambridgemaths.org](mailto:enquiries@cambridgemaths.org)

## Blog



### Lynne recently blogged:

"We're going to design an integrated programme that brings together curriculum, assessment, supporting resources and professional development. We will be working with other colleagues in the university who have an interest in maths education, such as the physicists and social scientists. We'll be making sure we pay close attention to mathematics education in both the skills sector and in catering for those for whom numeracy is a struggle.

We will be looking at the full progression from early years through to the oldest students. Although the university is mostly concerned with the latter, we'll be making sure that we search out the best research, to inform our work with those at the beginning of their mathematical journey, because those foundations are incredibly important. And through all of this we will be talking with our friends and colleagues worldwide to triangulate what we are doing against many different contexts and education systems."

<http://www.cambridgeassessment.org.uk/blog/cambridge-mathematics-aims-and-impact/>





**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](mailto:annette.allen@ocr.org.uk).

#### Summer 2015 OCR Consultative Forum Timetable

	Spring	Autumn
Business	Thurs 23 April	Thurs 19 Nov
Classics		Weds 23 Sept
Creative Arts		Tues 22 Sept
Economics		Weds 7 Oct
English		Thurs 8 Oct
EPQ		Thurs 1 Oct
Geography		Weds 30 Sept
Health and Social Care	Mon 16 March	Thurs 15 Oct
Higher Education	Weds 17 June	Thurs 12 Nov
History	Weds 15 April	Tues 3 Nov
IT & Computing	Weds 15 April	Weds 18 Nov
Maths	Weds 18 March	Weds 21 Oct
Modern Foreign Languages	Weds 25 March	Thurs 5 Nov
Physical Education	Thurs 26 March	Tues 10 Nov
Psychology	Thurs 12 March	Tues 13 Oct
Religious Studies	Thurs 19 March	Thurs 22 Oct
Science	Weds 1 April	Weds 11 Nov
Sociology	Thurs 12 March	Fri 9 Oct
VAL	Weds 1 April	Thurs 26 Nov



# 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

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