

Excellence in education



Update for schools

June 2014

Cambridge Pre-U is an exciting post-16 qualification preparing learners for university



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Cambridge Pre-U and the Government reforms to AS and A Levels

With Government reforms moving A Level closer to Cambridge Pre-U, we look at how the qualifications complement each other.

As the Government's programme of A Level reform takes shape over the next few years, schools are looking again at the qualifications they offer their sixth-form students.

While specific changes are being made to individual subject A Levels, the Government's broad reforms relate to the nature of the AS Level and to the way in which AS and A Level are assessed. AS Level will be

offered as a standalone qualification and will no longer count towards A Level. A Levels will become linear, rather than modular, qualifications, and will be assessed at the end of the course.

These changes bring A Levels more closely into line with Cambridge Pre-U qualifications. Ever since it was first taught in 2008, Cambridge Pre-U has followed a linear structure

In September last year, we published a useful guide for teachers in UK schools moving from modular to linear qualifications. The guide highlights things that teachers have to think about when they move from a modular specification to a linear one. It suggests ways forward in planning, teaching and learning and assessment. You can find the guide at www.cie.org.uk/cambridgepreu



with assessment at the end of the programme of study. It offers a framework that enables teachers to develop coherent courses, taking a holistic approach to the curriculum, linking together topics from different parts of a syllabus. In other words, Cambridge Pre-U qualifications already enjoy the benefits of the Government's new A Levels, while also drawing on six years' experience of teaching and assessment. This is why many schools are choosing to continue to teach Cambridge Pre-U or to offer the qualification for the first time.

Jon Cook, Head of History at Hampton School, feels that his students have benefited from the linear structure of Cambridge Pre-U

Cambridge Pre-U and the Government reforms to AS and A Levels continued

History: "We have enjoyed having two years to prepare the boys in the skill of essay-writing – and it has helped that the skills required by the different papers are complementary."

The 'mixed portfolio'

Some schools are likely to offer a 'mixed portfolio' of reformed A Levels and Cambridge Pre-U qualifications. Now that the reformed A Levels are moving closer to the structure and style of Cambridge Pre-U, the two qualifications complement each other in a way they haven't done before. Schools can offer as many or as few Cambridge Pre-U qualifications as they wish to. This allows schools to develop the curriculum that best suits their learners' needs.

Preparing learners for university

Ofqual identifies the main reasons for the reforms in its recent publication *An Update on the Reforms Being Made to AS Qualifications and A Levels.* One of these is the finding from higher education that the A Level modular system isn't giving students a broad range of knowledge. Developed with leading universities, Cambridge Pre-U already addresses this gap between sixth form and undergraduate-level study. All syllabuses develop in-depth



subject knowledge and skills in problem solving, critical thinking, team working and effective communication. The focus is on developing skills alongside knowledge, equipping students for university-level study.

Cambridge Pre-U also promotes independent and self-directed learning through a chosen research project, an invaluable skill for students preparing for university.

Recognition from universities

Universities around the world acknowledge the way in which Cambridge Pre-U prepares

students for higher education, and accept Cambridge Pre-U as a pre-university qualification.

The Russell Group, which represents leading UK universities such as Cambridge, Oxford, Bristol and UCL, has welcomed the academic rigour, retention of subject specialism and linear approach of Cambridge Pre-U. There is also growing recognition across the US, including MIT, Stanford and other lvy League universities.

2016 syllabuses now available on our website...

We have consulted with schools on our 2016 syllabuses (for examination in 2016, 2017 and 2018) and made revisions where necessary to meet the needs of schools and learners. These syllabuses have now been accredited by Ofqual and are ready to teach. We've published them on our website at www.cie.org.uk/cambridgepreu



Case study: North London Collegiate School, Edgware, London

Founded in 1850, North London Collegiate School is an independent day school for girls in London. The school recently started teaching a range of Cambridge Pre-U subjects. We talked to Matthew Shoults, Senior Deputy Head (Curriculum), to find out about the school's experience of teaching the qualifications.



Q. Which Cambridge Pre-U subjects are taught at NLCS?

A. We currently teach English Literature, Religious Studies and Philosophy, French, German, Spanish, Italian and Art. From next year we will also teach Chemistry and Politics.

Q. You only started teaching Cambridge Pre-U relatively recently. What made you choose these qualifications?

A. An obvious appeal was the subject-rich content, and an escape from some of the problems of A Level assessment. The linear approach was also key. We wanted students to be able to develop over the whole of the sixth form before their public examinations.

Q. What benefits do you think Cambridge Pre-U offers your students?

A. The linear nature of the course has given subject departments back the time and freedom to reach beyond the syllabus. In English, for example, we have been able to spend much of the Autumn Term of Year 12 exploring the canon of literature, starting from Homer and Greek Tragedy, to give students a thorough grounding, before moving on to any set texts.

Q. Do your students enjoy particular aspects of Cambridge Pre-U courses?

A. Girls have particularly enjoyed the literary elements in the language courses, and the texts available in English. But above all the structure of the course has been appreciated. After we moved to the Pre-U in Modern Languages, the word used most often by girls in discussion with the Head of Modern Languages was "freedom".

Q. Are the courses stretching students of all abilities?

A. Yes. Many of our girls have secured D1 or D2 grades, but they have still found the course challenging.

Q. Are the courses developing your students' skills?

A. Students have commented that the nature of the course, and the stretch of some of the writing required, has prepared them well for university.

Q. How have you found the experience of teaching Cambridge Pre-U alongside A Level?

A. Generally this has not been a problem. Arrangements for study leave in Year 12 have had to be carefully planned, but this has been manageable. The move to linear A Levels will help the process further.

Q. What have your Cambridge Pre-U students gone on to do after NLCS?

A. Of those who left last year, all have gone on to pursue further study, the vast majority at Russell Group universities, including just over half at Oxford or Cambridge.



NLCS students feel that Cambridge Pre-U has prepared them well for university.

Spotlight on: History

Cambridge Pre-U History gives learners the chance to study what interests them, to explore new topics and to question and challenge accepted views. We spoke to Jessica Flint, Head of History and Politics at Watford Grammar School for Girls, about how her students responded to the course.

Watford Grammar School for Girls is a girls' state school. It is a Specialist College for Visual Arts and for Maths and Computing, and one of only five UK schools which are training schools for the Edward de Bono Thinking Tools. It has been accredited as a Thinking School by the University of Exeter. Next year's Year 12 at the school will be the fourth cohort of Cambridge Pre-U History students.

The school first became interested in the qualification after it was recommended by a colleague who is now a principal examiner for Cambridge Pre-U. Jessica explained: "Her passion about the new qualification convinced us it was worth taking on."

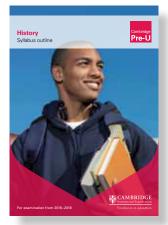
She said that her students have responded to the demands of the course positively. "Most students have enjoyed what they see as being the luxury of developing their skills during Year 12 as opposed to rushing through their other Year 12 courses. It means that we can spend time discussing key issues, events and relevant historiography."

A flexible course

In particular, Jessica's students enjoyed the course's 'Outline' papers and the chance to explore their own interests in the Personal Investigation.



The 'Outline' papers give learners a sense of perspective and a broad historical context. Candidates choose two papers from a range of 'Outlines'. An outline covers a country or region and a date range – for example, Paper 1B is 'British History Outlines 1399–1815'. For each outline, candidates can choose to study a wide range of topics. In the outline above, for example, the 65 topics



range from 'The early Lancastrians, 1399–1422: domestic policies and problems' to 'Art and architecture: the intellectual and cultural life of eighteenth-century Britain'. The sort of flexibility that this gives students has made

Cambridge Pre-U helped to bridge the gap from school to university, particularly in understanding the role of historiography but also in developing the skills of analysis and evaluation.

Jessica Flint, Head of History and Politics, Watford Grammar School for Girls

Cambridge Pre-U History an attractive option at Watford Grammar School for Girls.

Students at the school have also relished the opportunity to work on the qualification's Personal Investigation. This is an extended essay of approximately 3500–4000 words. The candidate chooses the title of their Personal Investigation, which is then approved in advance by Cambridge International Examinations. The Personal Investigation gives Cambridge Pre-U History students the chance to explore in depth a subject that really excites them. Jessica said: "They've chosen a vast range of topics for their Personal Investigations – from Eleanor of Aquitaine through to interpretations of the Holocaust via the fall of the Romanovs!"



Preparing for university

We asked Jessica if she felt that her students had benefited from studying Cambridge Pre-U History. "Absolutely," she said. "The Pre-U requires significant independent study, and it is this that has benefited the students the most."

Many of Jessica's Watford Grammar School for Girls Pre-U History students have gone on to study History at university. "Their destinations have included Cambridge, Oxford, Warwick, Manchester, and many more."

Finally, we asked Jessica if her students felt that Cambridge Pre-U History was a good preparation for their studies at university. She said: "On the whole, yes, they do. Feedback we have had is that they feel that the

Cambridge Pre-U requires significant independent study, and it is this that has benefited the students the most.

Jessica Flint, Head of History and Politics, Watford Grammar School for Girls

Cambridge Pre-U helped to bridge the gap from school to university, particularly in understanding the role of historiography but also in developing the skills of analysis and evaluation."

Examples of Personal Investigations

- How accurate is the view that Robespierre betrayed the revolutionary principles through his rule of France?
- Eleanor of Aquitaine: 'A politically astute woman, except when it comes to matters of the heart.' Discuss.
- How significant was Cavour to Italian unification?
- To what extent were Suffragette tactics mainly responsible for women being granted the right to vote in 1918?
- Assess the importance of Zhukov to the Russian victory on the Eastern Front in World War 2.

Learn more! Find out more about Cambridge Pre-U syllabuses at www.cie.org.uk/cambridgepreu

The International Young Physicists' Tournament or 'Physics Olympics' – Shrewsbury 2014

This year the UK will host the International Young Physicists' Tournament (IYPT) for the first time. We find out more about the event and the UK team, which includes two Cambridge Pre-U Physics students.

The UK will welcome teams from 30 countries when they converge on Shrewsbury School from 3 to 10 July to compete in the 27th IYPT. The UK team will comprise five pupils: three from Shrewsbury School (winners of the UK competition) and two from John Leggott College (runners up). Two of the UK team, Ilya Lapan and Dom Dootson, both of Shrewsbury School, are currently studying Cambridge Pre-U Physics.

The Tournament originated in Russia but now draws teams from as far afield as China, Korea, Taiwan, Iran, Sweden, Georgia, Nigeria, Australia and New Zealand. It is a truly global event challenging some of the best young physicists in the world to present the results of their research on 17 challenging physics problems. These problems are published almost a year in advance, and the task for each team is to interpret the problem, carry out theoretical and experimental research, and then prepare a presentation on their work and conclusions. Preparation is hugely time consuming, but it is rewarding and pushes pupils and their teachers beyond their comfort zone, requiring innovative practical work and creative modelling.

The competition consists of a series of five rounds in which groups of three teams take part. They challenge one another in turn with one team



Ilya and Dom investigating the terminal velocity of a neodymium magnet as it falls down a copper tube under the influence of electromagnetic braking forces.

presenting, one opposing and one reviewing a particular problem. The presenter provides a detailed overview of his or her team's work. The opposer responds to this and then invites the presenter into a discussion in front of an international team of judges. The discussion, or 'Physics Fight', involves a detailed critique of experimental methods, theoretical models and conclusions and can become quite heated. After this the reviewer assesses the strengths and weaknesses of both presenter and opposer, pointing out any shared misconceptions, and poor or missing physics. Then it is time for questions from the international panel of judges, who are all professional

academic physicists. The fight ends with grading for all three roles and the round continues until each team has performed each role. A round lasts three to four hours and there are five rounds in the competition spread over several days. The three teams with the highest aggregate score compete in the IYPT final.

Steve Adams (UK team leader and Head of Science at Shrewsbury) says that the linear nature of the Cambridge Pre-U Physics course, coupled with its willingness to engage with mathematical principles of physics and its Personal Investigation, is ideal preparation for IYPT team members.

Ilya Lapan, who has an offer to study Physics at Oxford next year, is presently working on a problem involving the chaotic behaviour of a class of electrical circuit. He says: "Pre-U Physics provides a challenge for mathematically inclined students and the Pre-U investigation is in many ways similar to an IYPT problem, and just as much fun!"

Cambridge Pre-U Physics provides a challenge for mathematically inclined students and the Cambridge Pre-U investigation is in many ways similar to an IYPT problem, and just as much fun!

Ilya Lapan, Cambridge Pre-U Physics student



Cambridge Pre-U in the press

We take a look at what newspaper columnists and bloggers have been saying about Cambridge Pre-U.

The most frequent mentions of Cambridge Pre-U have been in the context of pieces about UK A Level reform. Kevin Stannard of the Girls' Day School Trust talks about Cambridge Pre-U in his blog for The Telegraph about "the contradiction at the heart of A Level reform". Writing about the reforms of 2000, he says that "while the AS/A2 structure clearly suited a wider constituency, the reformed A Level no longer discharged its original, narrower, function - that of preparing and 'qualifying' students for academic courses at selective universities". As a result of this, he says, many schools pressed exam boards to develop an alternative to the modular A Level, "and the Pre-U was born".

Ed Elliott, Head of The Perse School in Cambridge, blogged about A Level reforms for the *Cambridge News*. He makes the point that "one size rarely fits all, and different subjects and different pupils have varying assessment needs". He says that independent schools are fortunate in

being able to create "a varied exam menu". Writing about his own school, he says: "We prioritise critical thinking, rigour and challenge in our Cambridge International Examinations "developed a post-16 qualification – the Cambridge Pre-U – with universities to try and address the problem and improve student learning skills".

Richard Morgan, a sixth-form head and classics teacher, blogged for the *Cambridge News* about gadgets, and how they make it "increasingly difficult to escape from the demands

Cambridge International Examinations developed
Cambridge Pre-U to improve student learning skills.

William Stewart, Times Educational Supplement

selection, and thus already offer a mix of A Level, Pre-U, International A Levels, International GCSE and GCSE courses."

William Stewart in the *Times Educational Supplement* wrote about Cambridge International Examinations' skills survey of more than 1000 teachers (reported on in the last issue of *Cambridge Pre-U Update for schools*). He writes that 92 per cent of teachers identified critical thinking as one of the most important skills, but that 85 per cent thought this was missing in post-16 courses. Stewart writes that

of modern technology". While he acknowledges the benefits of digital technologies, such as encouraging collaboration among students, he is concerned that "we risk losing a crucial aspect of scholarship: academic reading". He says that "unprecedented access to technology has left them with the need for 'fast facts". In the light of this, he writes: "Solely knowing and reciting the bare facts will not guarantee success at Pre-U and A Level, which require significant levels of application taking the basic principle and applying it to an unfamiliar situation."

Solely knowing and reciting the bare facts will not guarantee success at Cambridge Pre-U. Richard Morgan, Cambridge Evening News

Cambridge Pre-U Getting Started workshops June and July 2014, London

We offer a comprehensive programme of professional development and support for Cambridge Pre-U. As part of this support we are running a series of free workshops in London (Art & Design will be held near Reading*).

These workshops are designed for teachers who are considering starting a Cambridge Pre-U course, and have not yet attended a professional development workshop, or those who have been teaching for less than one year.

The workshops will give an introduction to the syllabus and will provide opportunities to discuss with colleagues the practicalities of starting to teach Cambridge Pre-U.





Date	Subject
Thursday 12 June	Cambridge Pre-U Business and Management (9771)
Thursday 12 June	Cambridge Pre-U Mathematics (9794)
Friday 13 June	Cambridge Pre-U Economics (9772)
Thursday 19 June	Cambridge Pre-U Further Mathematics (9795)
Wednesday 2 July	Cambridge Pre-U Art & Design (9798)*

*this course will be held at The Oratory School, near Reading

Places are limited and will be allocated on a first come, first served basis. Full venue and workshop details will be sent out to all registered teachers prior to the event. Refreshments and lunch will be provided on the day. To book your place, please visit the events and training calendar on our website at www.cie.org.uk/events

What's available

Here's a list of subjects for examination in 2016. Subjects marked with an asterisk (*) are also available as Short Courses.

Mathematics*
Further Mathematics*

Literature in English

Biology Chemistry Physics

French*
German*
Italian*
Mandarin Chinese*
Russian*
Spanish*

Art History
Classical Greek
Comparative Government
& Politics
Geography
History
Latin
Philosophy & Theology

Business & Management Economics

Art & Design Drama & Theatre Music

Psychology

Global Perspectives & Research

(a two-year extended project qualification). A Global Perspectives Short Course is also available.

> Please note: Classical Heritage and Sports Science have been withdrawn. The last examinations for these subjects will take place in 2015.

Learn more! Find us at www.cie.org.uk/cambridgepreu, or contact us at info@cie.org.uk or on 01223 553554. Find our stand at conferences, or attend one of our free INSET days.

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