

# Update for schools

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



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## Cambridge Pre-U exam entries continue to rise

**Latest figures show the number of Cambridge Pre-U exam entries continuing to rise, evidence of the growing popularity of Cambridge Pre-U across the UK.**

With Cambridge Pre-U now an established qualification for many sixth-formers, the number of exam entries in 2016 increased by 13 per cent on 2015 – indicating the strong reputation of Cambridge Pre-U as both challenging and enjoyable, and ideal preparation for university.

In terms of the most popular Cambridge Pre-U subjects in 2015/16, Mathematics was in the top five – read our Spotlight article (page 3) to find out more about this course. Literature in English, History, Global Perspectives, and Physics were also among those subjects with the biggest exam entries.

‘We’re delighted that Cambridge Pre-U continues to grow,’ commented Peter Monteath of Cambridge International Examinations. ‘Teachers remain highly supportive of Cambridge Pre-U, welcoming its capacity to reward the very bright while also boosting performance for

students at every ability level.’ It’s also clear from the rise in entries that the positive experience of so many older sixth-formers, as highlighted by our alumni on page 5, is influencing the choices made by younger students when they plan their pre-university study.

“ Teachers remain highly supportive of Cambridge Pre-U, welcoming its capacity to reward the very bright while also boosting performance for students at every ability level. ”

**Peter Monteath**, Regional Director, UK & Ireland,  
Cambridge International Examinations

# Students celebrate exam success

As the 2016 exam results were announced, schools across the country celebrated their Cambridge Pre-U success in social media and on their websites.

## Here are some comments from schools:

At **The Perse School** in Cambridge, 'nearly one in two (45.5%) A Level and Cambridge Pre-U entries in 2016 was awarded an A\* or Cambridge Pre-U equivalent, the highest percentage ever recorded at the School'.

At **Oundle School**, 'ten per cent of the grades for Cambridge Pre-U subjects attracted the D1 grade... all candidates taking German this year secured the highest Distinction grades at Cambridge Pre-U'. Head of Oundle School Sarah Kerr-Dineen said: 'I am really delighted with the consistently strong performance of our pupils, with over 60 per cent once again receiving A\* or A grades (or the Cambridge Pre-U equivalent) and the vast majority going on to their university of first choice.'

**Leweston School**, Sherborne, is celebrating another year of 'superb' results. Over half of all exams taken were passed at A\*, A or D3 grades, with 76 per cent passed at A\*-B or Cambridge Pre-U equivalent. Kate Reynolds, Head of Leweston, said: 'We are delighted that the high academic quality of education our students receive has been reflected in their superb exam results and we are absolutely thrilled with another set of brilliant results across the whole ability range.'

At **Charterhouse**, 92 per cent of Cambridge Pre-U exams taken were awarded Distinction or Merit grades – 48 students achieved Distinctions in all subjects taken, and 16 gained the equivalent of A Level A\* grades in all their subjects. James Kazi, Deputy Headmaster (Academic) said: 'I am hugely impressed by the commitment of the pupils and the endeavour that they had shown in preparing themselves for the examinations.'



Results day at Cardiff Sixth Form College



## Results day – what schools were saying on Twitter

**'Congratulations Elinor! Bio, A\*, Chem, A\*, Maths A\*, Cambridge Pre-U, Distinction 1. Heading to @ucl to study medicine.'**

Cardiff Sixth Form College, Cardiff

**'Iona will be reading Classics @Cambridge\_Uni following her excellent A\*, A\*, A, A results & a D2 in Cambridge Pre-U.'**

Alderley Edge School for Girls, Cheshire

**'Some of our boys who sat the Cambridge Pre-U courses earned Distinction One grades – the equivalent of A\*\*.'**

The Manchester Grammar School, Manchester

**'Many congratulations to @tom\_fh whose D1 at Music @cambridgepreu is equivalent of A\*\*.**  
**He's off to @mertonCollChoir as organ scholar.'**

The Cardinal Vaughan Memorial School, London

**'Congratulations to everyone receiving their @cambridgepreu results today: the only qualification where three Ds is a cause for celebration.'**

Owen Elton, Godalming College, Surrey

**'Congrats to all @DowneHouse1 @downemfl Pre-U Mandarin Chinese pupils – fantastic results with many A stars!!! #downermmandarin #GlorytoGod.'**

Downe House Girls' School, Berkshire

# Subject spotlight: Cambridge Pre-U Mathematics

In every issue of our newsletter we shine a spotlight on a particular Cambridge Pre-U subject. In this issue we've asked three teachers of Cambridge Pre-U Mathematics to tell us what they think about the course.

**Matt Baker (MB)** is Head of Mathematics at Rugby School where currently 55 per cent of the lower sixth take maths, with 58 per cent of these opting for the Cambridge Pre-U course – an increase of over 25 per cent on the previous year.

**Martin Elston (ME)** is Head of Mathematics at Charterhouse, which has offered Cambridge Pre-U Mathematics since it was first launched. It is the most popular subject in the sixth form, and is taken by 100 students with 40 students also taking Cambridge Pre-U Further Mathematics.

**Katharine Henson (KH)** is Director of Curriculum Administration at Downe House, where 50 per cent of the sixth form take Cambridge Pre-U Mathematics.



## What are the key benefits of Cambridge Pre-U Mathematics?

**MB:** We were attracted to Cambridge Pre-U Mathematics because it was a linear qualification with an interesting syllabus, designed to allow students to deepen their understanding of the mathematical ideas underpinning required techniques, and to neatly bring together knowledge from a variety of areas when problem solving. For example, numerical methods – a topic which can lead to routine number crunching – instead asks students to consider the rates of convergence of iterative processes and the concept of error terms, which is an interesting perspective on the subject.

**ME:** I feel that Cambridge Pre-U Mathematics 'fits in' with how the subject should be taught. The linear approach emphasises understanding and unity, rather than dividing the subject between unrelated modules – so the teaching of calculus, for example, is also included within the teaching of mechanics. This allows for a wider syllabus, covering both maths and statistics, which for many students is better preparation for their next stage of study.

**KH:** The linear approach is a significant benefit because there are no 'artificial stops' to learning. Students can then revisit subjects as they progress through the course and often find, as they mature, that they are better able to cope with subjects they originally thought difficult.

## Is Cambridge Pre-U Mathematics suitable for the full ability range?

**MB:** For the brightest students, it is reassuring to know that the D2 grade (A\* equivalent) is examined from the perspective of talent and understanding which means that a few small errors are less likely to affect the final grade. The D1 grade asks very strong students to enrich their mathematical knowledge beyond the level usually experienced in the sixth form, and this encourages them to attempt more complex questions.

**ME:** The exam paper is structured in such a way that less able students can tackle earlier questions with confidence, even though later questions may be too difficult. All students also benefit from the emphasis on problem solving and thinking skills, and when faced with a specific task are encouraged to search across the whole syllabus for the most appropriate method.

## Subject spotlight: Cambridge Pre-U Mathematics continued

**KH:** As mathematics is an increasingly popular subject, there will certainly be a spread of ability across a larger cohort, but the Cambridge Pre-U syllabus covers a wide range so there is something for everyone, from practical skills to quite esoteric topics. The exam format is also designed to encourage all ability levels, which is a real benefit.

### What is Cambridge Pre-U Mathematics like to teach?

**MB:** The linear approach gives staff more time to run with ideas rather than having to push through syllabus topics at speed, which allows us to take students deeper into mathematical content when a particular interest emerges. Preparing for a linear exam is different, given the amount of material to revisit, but we appreciate this more holistic approach to revision.

**ME:** Our teachers certainly enjoy teaching the broader syllabus, and this enjoyment filters down to the students. Subjects such as complex numbers, for example, are rarely found in comparable qualifications yet students find this topic very interesting and also useful if they hope to study science at university. The linear approach means fewer exams, and more teaching time, which we find positive. We also find that Cambridge Pre-U Mathematics fits very well with Cambridge Pre-U Further Mathematics, with the two courses working hand in hand.

**KH:** The flexibility of Cambridge Pre-U Mathematics is one of its chief benefits for the teacher, and from my perspective it has proved to be quite a liberating course to teach. We are free to build our own schemes of work, for example, which allows us to respond to the needs of the students and to exploit the strengths of the faculty. There are also no set textbooks so we are free to find our own resources, many of which are shared among the wider Cambridge Pre-U community.



### What do your students think of the Cambridge Pre-U Mathematics course?

**MB:** Our students certainly enjoy the emphasis on understanding as well as technique. For example, topics within applied maths focus less on the reproduction of statistical diagrams and more on the maths behind these techniques – such as the use of residuals in regression or an in-depth examination of combinations – which our students have thoroughly enjoyed. We also find that the course encourages curiosity – students rarely ask if a topic is ‘on the syllabus’, and they also develop confidence in their mathematics and spend time considering their approach to solving problems.

**ME:** Anecdotally, both students and parents have said how much they have enjoyed the course, with the more able students also welcoming the chance to be stretched.

**KH:** For some students, the linear approach is seen as a ‘hurdle’ but once they start the course they find their confidence builds and also their satisfaction in the work they are able to do. Students have to have ‘stickability’ as they will be studying maths for two years, but I find that this encourages unexpected resilience, and a determination in students to work hard and keep up with their peers.



To find out more about Cambridge Pre-U Mathematics, go to [www.cie.org.uk/cambridgepreu-maths](http://www.cie.org.uk/cambridgepreu-maths)

# Success stories from Cambridge Pre-U alumni

We are always delighted to hear from former Cambridge Pre-U students who have gone on to achieve their academic ambitions, and from the teachers who supported them. Get in touch if you have news of former Cambridge Pre-U students from your school or college, by emailing us at [UKSchoolsDevelopment@cie.org.uk](mailto:UKSchoolsDevelopment@cie.org.uk)

## Naeema Hafesji, formerly of The Petchey Academy, Hackney, London



“ I have just started at Churchill College, the University of Cambridge, studying geography. The Cambridge Pre-U courses definitely helped my achievement at school and especially in getting

a place at Cambridge. Cambridge Pre-U required independent study and research, which helped me develop a genuine interest in my subjects; this in turn translated into better academic performance. I particularly enjoyed the emphasis on extended answers (essay writing) as it encouraged a deeper understanding of the topics, compared to the fleeting focus on memorisation so common at A Level.

The essay questions were also far more challenging and interesting, and therefore more enjoyable to answer, than A Level questions. Since the Cambridge Pre-U forced me to make connections, think holistically and creatively, I believe I was better equipped during my interview at Cambridge. Overall, the Cambridge Pre-U course encouraged independence and critical thinking, which allowed me to fully immerse myself in the subjects I was studying.”

## Alasdair McNab, formerly of Hampton School, Middlesex



Old Hamptonian Alasdair McNab, who achieved the top score in the 2012 Cambridge Pre-U Physics exam, recently gained a very high first in his Natural Sciences degree at the University of Cambridge. He is also a gifted actor and

while in the USA with CAST (Cambridge University American Stage Tour) he sent us this comment:

“ I really have the Cambridge Pre-U course to thank for helping my transition into university. The focus on independent study and practical scientific investigation provided a stepping-stone to the life of an undergraduate physicist.”

## Marissa Nash, formerly of Charterhouse, Surrey



“ After Charterhouse I went to study geography at Royal Holloway and I have recently graduated with a first. I found that having studied Cambridge Pre-U I had a much greater understanding of

geography as a subject, as Cambridge Pre-U had given me the opportunity to study the subject in more breadth and depth than perhaps other qualifications. As a result the transition from sixth form to university was not as difficult as I had expected. Cambridge Pre-U encourages the writing of essays, and I found this gave me an advantage at university as I had already learnt to develop my own writing style suitable for assessments, and this potentially helped me to achieve 85 per cent in my dissertation.”

# Become a Cambridge Pre-U trainer

**Support your subject and enhance your professional development by joining our training team.**

With Cambridge Pre-U continuing to grow, there are more opportunities than ever before to join the Cambridge Pre-U training team. Paul Ellis, Head of Teaching and Learning Strategy at Cambridge says trainers help maintain the quality of their subject by introducing teachers to new ideas, validating existing approaches, and facilitating the exchange of best practice.

Becoming a trainer is also a significant professional development opportunity, adds Paul: 'Trainers learn how to teach the subject to the best of their ability, and can bring this knowledge into their own classrooms, and share it with colleagues.'

Schools also recognise that the trainer role can represent important career enhancement, especially for more junior staff and in contexts where promotion routes may be limited: 'The chance of becoming a trainer can improve staff retention and development,' notes Paul, 'as teachers can add peer to peer training experience to their CV. In addition, there are opportunities for "promotion" within the trainer community.'

Cambridge Professional Development comprises three types of training – introductory, extension and enrichment – each requiring different levels of experience, so as a



trainer's career progresses they can also build their training responsibilities and their own understanding of teaching and learning.

Recently updated, the Cambridge trainer recruitment process has become more detailed and thorough, to ensure the selection of applicants who already have many of the skills required. 'In essence,' explains Paul, 'we advertise, we sift, we ask applicants to showcase their talents, and then we recruit those who perform the best. The process gives applicants a taste of what is

expected from a trainer, and should be a very positive experience for all involved, whatever the outcome. We encourage those who do not make the final stage to build their skills and try again, and to see the process as useful professional development in its own right.'

Time commitment is a common concern for prospective trainers. Paul is keen to reassure: 'We know teachers have full diaries, so we only expect our trainers to deliver around one session per term, with each session lasting a day. We ask trainers well in advance and they can always refuse.'

Once a trainer is 'in post', Paul and his team continue to support them as much as possible: 'My team often delivers sessions alongside a trainer and we ask more experienced trainers to mentor new recruits. We also provide opportunities for trainers to discuss issues, or make contributions, through our dedicated portal for Cambridge trainers, regular trainer newsletters, or simply by talking to a member of the training support team.'



## Need to know:

- Experience of teaching Cambridge Pre-U is essential – ideally three to five years in the classroom.
- Trainer recruitment takes place at set times each year – visit [cie.org.uk/cambridge-for/trainers](http://cie.org.uk/cambridge-for/trainers) for more details, to register your interest, and for more information on the recruitment process.
- For more on our approach to Cambridge Professional Development, see *Cambridge Outlook* Issue 22. Find it at [www.cie.org.uk/news/newsletters](http://www.cie.org.uk/news/newsletters)

## Why become a trainer?



Dr Arlene Holmes-Henderson joined the Cambridge Pre-U training team in April 2015, one of the first to take part in the new selection process. An experienced Cambridge Pre-U Latin teacher, language education researcher and training consultant, Dr Holmes-Henderson is also an academic in the Faculty of Classics at the University of Oxford.

### Why did you decide to apply to be a Cambridge Pre-U trainer?

'I knew it would provide excellent professional development, and I also wanted to contribute to the development of Cambridge Pre-U Latin and Cambridge Pre-U Classical Greek. I have always found that teaching a subject to others improves my own subject knowledge and communication skills, and this has proved to be the case with Cambridge Pre-U training.'

### How did you find the application process?

'It was lengthy and involved a number of stages: an application form; a selection event during which we designed and delivered a "mock training" presentation; and the shadowing of an experienced trainer. This may sound daunting but it was excellent preparation for life as a trainer – you know what is required of you, and the support from Cambridge has been excellent at every stage.'

### What qualities do you think the ideal Cambridge Pre-U trainer should have, and how does peer to peer training compare to classroom teaching?

'Training teachers is rather different from teaching students. Firstly, communication skills are vital – teachers do not like to be reprimanded! Trainees must feel that the trainer is fully confident with the syllabus and subject content being discussed, but they also want to relate to the trainer as a colleague. This is where teachers with recent classroom experience have the edge – if you have taught 16–18 year-olds, you can probably already relate to your course participants. The ability to build rapport quickly is a benefit (learning and using trainees' names helps!), and a flexible approach is essential. You can never prepare for every eventuality, so the ability to adapt your plans with a smile, while maintaining a professional demeanour, is key.'



### Are there any unexpected benefits – professional or personal – of being a Cambridge trainer?

'I love training teachers and often learn as much from them as they learn from me. Far from being old and boring subjects, Latin and Classical Greek lend themselves to dynamic and interactive teaching methods. Most teachers enjoy sharing their favourite learning and teaching activities, and I particularly enjoy hearing new rhymes and songs which teachers have developed to support language learning and grammar consolidation. One day, I'll write a compendium of these!'



### Cambridge trainers around the world

Dr Holmes-Henderson is one of many Cambridge Pre-U trainers who also run sessions – worldwide – on Cambridge syllabuses: 'If you enjoy travelling, have a passion for education and want to be a professional development ambassador for your subject, being a Cambridge trainer could be the ideal opportunity for you,' she says, adding: 'Many of the applicants I met at the selection event have subsequently become Cambridge trainers and we enjoy meeting up in interesting international locations!'

If you have taught both Cambridge Pre-U and other Cambridge qualifications, please let us know when you apply as we always want to hear from teachers with wide-ranging experience.

Find the application form at [www.cie.org.uk/cambridge-for/trainers](http://www.cie.org.uk/cambridge-for/trainers)

## Cambridge Schools Conference focuses on 'Leading learning'

The second of this year's Cambridge Schools Conferences took place in September at Homerton College, Cambridge, and attracted 210 delegates from 42 countries. Focusing on the theme of 'Leading learning', the event was both innovative and interactive, and highlights can be viewed on the Cambridge website. The final Cambridge Schools Conference of 2016 will be held in Kuala Lumpur, Malaysia, on 6–7 December 2016. Find resources at [www.cie.org.uk/conference](http://www.cie.org.uk/conference)



## Training and events

We are holding training courses for the following Cambridge Pre-U and Cambridge International AS & A Level subjects over the next few months – unless fully booked, registration stays open until the day before the event. For more details, go to [www.cie.org.uk/events](http://www.cie.org.uk/events)

### Cambridge Pre-U Introductory training

#### November 2016

- Literature in English (9765)  
– 7 November 2016
- French (9779) – 10 November 2016
- Mandarin Chinese (9778)  
– 16 November 2016
- Date to be confirmed:
  - Classical Greek (9787)
  - Latin (9788)
  - Art History (9799)

#### 2017

- Philosophy and Theology (9774)  
– March 2017

### Extension training

- History (9769) – 14 November 2016

#### 2017

- Literature in English (9765)  
– April 2017

### Cambridge International AS & A Level Introductory training

#### November and December 2016

- Geography (9696)  
– 14 November 2016
- English Literature (9695)  
– 30 November 2016
- Information Technology (9626)  
– December 2016 (date tbc)
- Mathematics (9709)  
– 8 December 2016

#### 2017

- Geography (9696) – June 2017



## Looking for an art history syllabus?

The subject content of Cambridge Pre-U Art History is chronologically wide ranging, from the art of classical antiquity to cutting-edge 21st century works of art.

The Personal Investigation (approx. 3000 word essay) enables students to pursue a topic of their choice, helping to engage their imagination and interest in the subject and prepare them for university.

Find out more on our website at [www.cie.org.uk/cambridgepreu](http://www.cie.org.uk/cambridgepreu)

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