Cambridge O O O O THE MAGAZINE FOR CAMBRIDGE SCHOOLS WORLDWIDE

ISSUE 24, JANUARY 2017

Inside



Applied learning

Adding variety with creative and professional qualifications



Top 10 tips

... on getting the most out of the Cambridge Schools Conference



Regional viewpoint

Cambridge in India

In Focus

Reflecting on our learning

Understanding how we learn is at the heart of a Cambridge education – for students and teachers alike





Cambridge International Examinations prepares school students for life, helping them develop an informed curiosity and a lasting passion for learning. We are part of Cambridge Assessment, a department of the University of Cambridge.

Our programmes and qualifications Cambridge Primary Cambridge Secondary 1 Cambridge Secondary 2 Cambridge Advanced 16 to 19 years old* Cambridge Primary Cambridge Secondary 1 Cambridge IGCSE® Cambridge International AS & A Level Cambridge Cambridge Secondary 1 Cambridge O Level Primary Checkpoint Cambridge Pre-U Checkpoint Cambridge ICE Cambridge ICT Starters Cambridge ICT Starters Cambridge AICE Community *Age ranges are for guidance only

Cambridge Primary

Cambridge Primary develops learners' skills and understanding through the primary years in English, mathematics and science. Many schools use Cambridge Primary Checkpoint tests to measure learners' performance at the end of primary education.

Cambridge Secondary 1

Cambridge Secondary 1 builds skills, knowledge and understanding in English, mathematics and science. Cambridge Secondary 1 Checkpoint tests can be used at the end of this stage to identify learners' strengths and weaknesses in key curriculum areas.

Cambridge Secondary 2

Cambridge Secondary 2 develops skills in enquiry, creative thinking and problem solving, giving learners excellent preparation for the next stage of education. There are two assessment options: Cambridge IGCSE or Cambridge O Level. Both are globally recognised qualifications.

Cambridge Advanced

Cambridge Advanced is for learners who need advanced study to prepare for university and higher education. This stage includes Cambridge International AS & A Level and Cambridge Pre-U qualifications, providing learners with a passport to success at university and in employment.

We also offer a suite of **Cambridge Professional Development Qualifications** for teachers. These qualifications develop thinking and practice, and are taken by Cambridge teachers around the world.

Learn more! For more details about Cambridge programmes and qualifications at every stage of education, go to **www.cie.org.uk/education**

Welcome

ISSUE 24. JANUARY 2017

n September last year, British author and former table-tennis champion Matthew Syed spoke at a Cambridge Schools Conference. He came to discuss high performance, but what he talked about most was failure: how we deal with it and, crucially, learn from it. Reflecting on one's own mistakes is at the heart of success, he argued. I felt this was an important and interesting message for the wider Cambridge community, which is why we've asked Matthew to share it through the magazine (page 12).

'Learning how to learn', or understanding our own learning behaviour, lets us take a step back and think about our performance. Research has shown (see page 9) that students who plan and reflect do better in their exams. However, this applies not only to students, but to teachers as well. To be effective, we need to constantly adapt our own learning and teaching to make it fit for purpose. I hope you enjoy reading about this in *Cambridge Outlook*. If you have any questions, email outlook@cie.org.uk





Michael O'Sullivan Chief Executive, Cambridge International Examinations

About Cambridge International Examinations

Cambridge International Examinations prepares school students for life, helping them develop an informed curiosity and a lasting passion for learning. We are part of Cambridge Assessment, a department of the University of Cambridge.

Any feedback on this issue? Anything you would like to read about in the next issue? Contact us at:

Cambridge Outlook magazine, Cambridge International Examinations, 1 Hills Road, Cambridge CB1 2EU, UK t: +44 1223 553261 f: +44 1223 553558

e: outlook@cie.org.uk



Contents

News

4 Update
The latest news from
Cambridge and the world

Feature

6 The measure of quality
Upholding the standard of
Cambridge qualifications
around the world

In focus: Learning how to learn

- 8 Introduction

 How can we produce selfaware, independent learners?
- 11 Explaining metacognition Simplifying the language of 'learning how to learn'
- 12 Expert interview
 Author Matthew Syed
 talks about how failure
 is our greatest tutor



- 14 The power of understanding learning and the benefit to teachers and students
- 16 How to embed reflective practice in your school Fostering a culture of trust and high standards

Top 10 tips

19 Getting the most out of a Cambridge conference The only checklist you need

Case study

20 Cambridge's creative and professional courses How schools bring variety to their curricula

Resources round-up

22 Support for schools

New books and resources

Professional development

24 Training and events for continued learning

Behind the scenes

25 The go-between

How textbooks become 'endorsed by Cambridge'

A view from...

26 India

Follow our code

Look out for these colours throughout this magazine – they will help you to easily identify the Cambridge education stages that you want to read about.















Keeping you up to date with news from Cambridge and our schools around the world



www.facebook.com/cie.org.uk in www.cie.org.uk/linkedin www.cie.org.uk/googleplus





Indian students put their questions to University of Cambridge Vice-Chancellor

Cambridge IGCSE and Cambridge International A Level students at Podar International School in Mumbai met the Vice-Chancellor of the University of Cambridge, Professor Sir Leszek Borysiewicz, as part of his six-day visit to India. The Vice-Chancellor took part in an interactive session with students and spoke about the University of Cambridge, studying in the UK and the move from school to university.

The Director of Podar Group of International Schools, Dr Vandana Lulla, said: "The visit had a great impact on the students. They were inspired by his conversations on 21st-century research and education."



Ruchira Ghosh, Regional Director South Asia for Cambridge International Examinations, said: "Cambridge has a strong partnership with Indian educational institutions. We're proud to have a network of over 370 schools in 24 states that is strengthened by the outstanding reputation of the University of Cambridge."

Admissions experts head to China

New conference brings speakers from universities all over the world

China's inaugural Cambridge Recognitions event attracted 160 delegates from schools across the country, reflecting the increasing number of Chinese students who decide to study abroad. Representatives from universities in the UK, Germany, the USA, Canada and Australia gave insight into their admissions processes to help schools support Cambridge International A Level students through their applications.

"I am delighted that more universities recognise Cambridge exams," said Val Sismey, Head of Recognitions at Cambridge, at the event. "We want to continue providing Chinese students with diversified curricula and help them continue their studies at their dream universities."



Olympic spirit

Pupils and teachers from St Paul's School, a Cambridge school in São Paulo, Brazil, were first-hand witnesses to history being made as volunteers at the 2016 Olympic Games in Rio. Sixth-form student Isabella Castilla Russo Corrêa worked in visitor services, while Senior PE Coordinator Andrea de Luca Cunha and Campus Manager Claudio Zsigmond worked directly on sporting events.



Above Andrea found time for a snap with British silver medallist Jessica Ennis-Hill Left Isabella on duty, helping spectators



Global roundup

What's happening in the world of international education

Higher education gender divide persists

Although more women than men are now university graduates, women are still less likely to enter and graduate from more advanced levels of higher education such as doctoral or equivalent programmes, according to the 2016 edition of the Education at a Glance report from the Organisation for Economic Co-operation and Development. This was to some degree down to a gender divide in students' fields of study at that level, with women under-represented in subjects such as science and engineering.

 US institutions encourage more students to study abroad

Twelve US higher education institutions have reached their goal to get more of their students to study abroad just two years after joining the Generation Study Abroad initiative. More than 700 colleges and organisations have now joined the initiative, run by the Institute of International Education (IIE), which

aims to increase the number and diversity of American college students who study abroad by 2020. According to the IIE, evidence shows that study abroad contributes to creativity, cognitive ability, student success, and career readiness, yet less than 10 per cent of American undergraduates study abroad, with only a quarter of those from underrepresented groups. For more details visit www.iie.org/Programs/
Generation-Study-Abroad

Campaign highlights UK education market

The British Council is part-funding a campaign to promote UK education to international students. Study UK Discover You (study-uk.britishcouncil. org) provides practical information for international students, including advice on choosing a course, financial support, visas and life in the UK. It also features interviews with members of the international community of alumni, highlighting their wide range of career paths and how they got there.

In brief

Syllabus changes

Make sure you never miss out on an important update to one of our syllabuses. Every September we publish Syllabus Changes for Cambridge Schools, a comprehensive guide to all changes large and small. Find the Syllabus Changes document, and sign up for alerts to future changes, at www.cie.org.uk/new

Social media in China

Cambridge now has a presence on one of China's most popular social media platforms, WeChat. This is a great channel through which we can communicate with our schools, students and parents, and we have 800 followers already... and counting.

To follow Cambridge on WeChat in Mandarin or English, search 剑桥国际考试 or **Cambridge_China**

Making marking and reporting easier

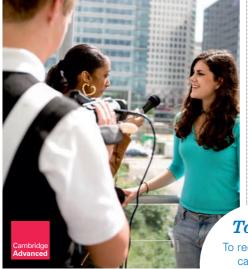
Enhanced on-screen reporting for progression tests will be one of the features of our revised Cambridge Primary and Secondary 1 websites, due to launch soon. The refreshed sites will have better navigation and a new look.

cambridgeprimary.cie.org.uk cambridgesecondary1.cie.org.uk

Digital media makes its debut

The first Cambridge International AS Level Digital Media & Design students will take their exams in November 2019. The new subject will have three areas of study: digital photography, moving image, and mobile and multimedia applications. The subject will also be available at Cambridge International A Level from 2020.

In September 2017 we're also releasing a new Cambridge International AS & A Level Further Mathematics syllabus, for first examination in June 2020. Currently this subject is only available at Cambridge International A Level.



24/6 customer support

In November 2016, our Customer Services became available 24 hours a day, six days a week.

That means no matter where in the world you are, you can contact us at a time that is convenient to you. Don't forget you can also find answers to frequently asked questions at www.cie.org.uk/help

What are our hours?

Sunday 00.01 UTC to Friday 23.59 UTC (closed Saturday)

Top tip

To reduce cost, call us on

+44 1223 553554 using **Skype** or a similar service

Contact details Phone: +44 1223 553554 Email: info@cie.org.uk ETTY IMAGES

The measure of QUALITY

The job of Cambridge's team of compliance inspectors is to uphold the standard of our qualifications, wherever in the world they are

f there's one thing your students can be confident about as they venture out into the world of further study and work, it's that their Cambridge qualifications will be respected and recognised by universities and employers globally.

But this doesn't happen by accident. The examinations process is strictly monitored so that a Cambridge International A Level in Mathematics, for example, is just as valid whether it was sat in Karachi or in California.

Schools will be very familiar with this process. As well as certain rules they are required to follow governing when, where and how examinations take place, they are visited from time to time by Cambridge-appointed inspectors.

Anna Williams is a Compliance Coordinator at Cambridge. It's her team's job to recruit inspectors, send them to schools, and then to stay in touch with schools to make sure any recommendations the inspectors make are followed up. She is part of a wider Compliance team, whose remit ranges from Centre self-assessment (where schools fill in a questionnaire about their readiness for the exam series and get tailored support and feedback) to malpractice investigations.

"The inspection process is to ensure the security, integrity and fairness of our exams across the world. And to make sure exams are conducted



"During their visit, the inspectors do their best to go with the flow. We don't want them to distract from the running of the exams"





in line with our regulations," she says. "The inspectors aren't there to catch people out – their job is to help schools understand and comply with those regulations."

Our compliance inspectors are experienced education professionals who go through rigorous training. As part of this they must spend time shadowing an experienced inspector – if your school has been visited by a pair of inspectors, it's probably because one of them is in training.

"During their visit, the inspectors do their best to adapt to what's happening in the school. If exams are going on, they'll go into an exam hall to observe. Examination periods are busy times for schools, and we don't want the inspectors to distract from the running of the exams," says Anna.

Another area an inspector might examine during a visit is the secure storage of the question papers, Anna says. "If, for example, an inspector looked at exam-paper storage and concluded that it wasn't in line with current regulations, they would usually look round the school to identify somewhere else that might be more appropriate. We do appreciate that we're running exams in a lot of countries, all with different resources. We don't, for example, say 'You need to keep your question papers in this particular model of safe',

Above Pictures taken by inspectors on their way to Cambridge schools. Remote or urban, any school can receive a visit – because every Cambridge exam is equally important Below An exam in the Maldives



Compliance inspection criteria

Our compliance inspectors are trained to focus on four key areas:

Correct timetabling of exams. Millions of Cambridge exams are taken all over the world every year, so the timetabling is absolutely vital to ensure the security of the content of papers.

Handling of exam materials. It is of paramount importance to ensure that question papers are kept securely until the exam. This maintains the integrity of the papers and makes sure that all candidates are treated fairly.

Exam room conditions. Making sure the environment is right for the candidates: appropriate equipment and desks: no excessive poise, etc.

Exam conduct. How the exam is run. Invigilators should be looking out for anything that looks unusual, especially in the modern age of smart watches and other portable technology.

but the same high level of security must apply to all Cambridge schools across the world."

Anna is keen to emphasise that every exam in every Cambridge school in every country is equally important – and that's why schools are inspected and regulations enforced. "We're expecting the same standard from the most remote Cambridge school as one down the road from us here in the UK. Our inspectors help us to make sure that standard is carried across, even though the resources available to all schools might not be the same."



Scrutiny on the high seas



The Republic of Maldives in the Indian Ocean is made up of more than 1000 islands in 26 ring-shaped atolls. About 200 of these islands are inhabited, and a further 80 are tourist resorts.

Over 300 schools here offer Cambridge examinations. "The November series falls in one of the wettest times of year, when there are often thunderstorms," says Ahmed Shakeeb, Director of the country's Department of Public Examinations. "Although the Maldives are known as 'the sunny side of life', we do have rain and wind. To reach some islands, the speedboats have to cross the equator and cope with very rough seas. This also affects the annual visit of the Cambridge inspector, who usually has to be taken to around 30 schools in three weeks."

Tony Hilbert (pictured above) is one inspector who has been taken on a stormy tour of the islands. "While I was in the Maldives I was mostly in the capital Malé, but I spent three or four days out on atolls that can only be reached by speedboat or seaplane," Tony says. "One trip took about five hours in a very rough sea. Although the boat was more than capable, it was very bumpy and something of a white-knuckle ride."

Despite the remoteness of some of the schools, they are inspected according to the same criteria (see box, above left) as any other Cambridge school. As with any inspection, Tony says, there were positives and negatives. "It was my job to identify any issues and help resolve them," he adds. "That – and the spectacular scenery – is the best thing about being an inspector."



IN FOCUS



Learning how to learn

Tristian Stobie, Director of Education, reflects on the educational culture needed to produce self-aware, independent learners

ere at Cambridge our role is not only to produce qualifications, but also to support schools to adopt effective teaching and learning practices. And one way that we do this is through our resources and professional development activities in support of developing the Cambridge learner attributes (confident, responsible, innovative, engaged and reflective).

It is to this latter attribute, 'reflective', that we turn our attention in the 'In Focus' section of this issue of *Cambridge Outlook*. The following articles provide some interesting perspectives and case studies emphasising the importance of learning how to learn.

The value of developing students' ability to monitor and self-regulate their learning has been known for some time but the extent of learning gains associated with good practice in this area is increasingly becoming recognised. It is also important to understand that most of the most powerful teaching and learning practices are interdependent, based on helping students understand themselves as learners and the nature of the discipline they are learning. These include: clearly defining learning goals and developing an understanding of what excellence looks like;



"Successful approaches to learning are as much about attitudes and habits as they are about strategies and skills"



providing feedback that helps learners understand their progress so that they are better able to monitor it themselves and become their own teachers; self and peer assessment; teaching students selfverbalisation and self-questioning; and reciprocal teaching focused on higher-level cognitive strategies such as summarising, questioning and clarifying.

Learning habits for future success

I think the author and academic Chris Watkins makes a critical point when he says that schools need to change their culture from a 'performance orientation' (proving competence/looking good) to a 'learning orientation' (making learning an



object of attention, conversation and reflection). Research conducted by Watkins shows that when this is done well students perform better in public examinations as well as developing the habits and strategies needed to be successful in higher education and the modern workplace. Schools can explain to parents – who demand results measured in terms of high grades and admittance to top universities – that having a learning orientation will improve performance. It is a win–win situation. (See my colleague Martina's article, right, for more about current research in this area.)

One theme that all the In Focus articles emphasise is that successful approaches to learning are as much about attitudes and habits as they are about strategies and skills. Failure needs to be embraced as a learning opportunity. Learners need to learn to enjoy challenge and diligent purposeful practice. Teachers and schools need to have high expectations for learners with a clear understanding that teachers are learning role models.

In this section

- 9 What does the research say? Further reading on self-regulation and related subjects
- 11 Simplifying the language of metacognition
- 12 Author Matthew Syed explains why failure is the greatest tutor
- 14 The power of helping students to understand how they learn
- 16 How to embed reflective practice in your school

Power lines

Helping students to understand the connections between themselves as learners and their subjects brings measurable benefits

What does the research say?

Let Martina Kuvalja from our Assessment Research team be your guide to further reading about metacognition and self-regulated learning

The capability of students to monitor and control their own behaviour plays a crucial role in the process of learning. This is known as 'self-regulation', a key component of metacognition, and comprises a set of executive skills that are strongly associated with students becoming successful and reflective learners.

There is an increasing amount of research demonstrating the short and long-term influence of successful self-regulation on educational performance. If this area interests you, here are a few suggestions for further reading:

Online article

 Article on OECD Insights on the role of metacognition in problem-solving (2014): goo.gl/CLmGcC

Research published in journals

- 'The relationships among executive functions, metacognitive skills and educational achievement in 5 and 7 year-old children', *Metacognition & Learning*, 10(2), 181–198; D Bryce, D Whitebread & D Szücs (2015): goo.gl/vLTWT8
- Teachers co-constructing pedagogical practices to support children's exploratory talk and self-regulation: the Children Articulating Thinking (ChAT) project', British Journal of Educational Psychology Monograph Series II: Psychological Aspects of Education – Current Trends, No 10; P Coltman, J Warwick, J Wilmott, D Pino Pasternak & D Whitebread (2013): goo.gl/h1JBdg

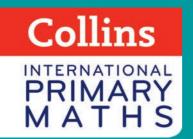
Books

- Self-regulation in the Classroom: Helping Students Learn How to Learn, RM Cash (2016); Free Spirit Publishing
- The Teaching and Learning Toolkit, S Higgins, D Kokotsaki & R Coe (2012); Education Endowment Foundation & The Sutton Trust: goo.gl/axJUhs
- Self-Regulated Learning: From Teaching to Self-Reflective Practice, DH Schunk & BJ Zimmerman (1998); The Guilford Press.



For more information on the research around these subjects, contact Martina Kuvalja (kuvalja.m@cie.org.uk) or Stuart Shaw (shaw.s@cie.org.uk) in our research team





Collins International Primary Maths offers full coverage of the Cambridge Primary Mathematics curriculum framework with a problem-solving and discovery approach to the learning of mathematics.

- Deliver the requirements of the Cambridge Primary Mathematics curriculum framework with confidence
- Enable all students to progress with a clear structure through six levels
- Support every child with clearly defined skills and different levels of challenge within each unit

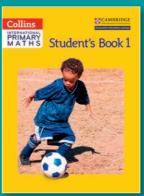


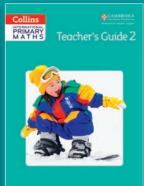
AUTHORS:

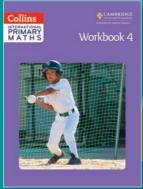
Caroline Clissold Paul Hodge Lisa Jarmin Ngaire Orsborn Paul Wrangles

SERIES EDITOR: Peter Clarke

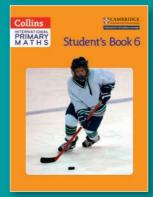
This series is endorsed by Cambridge International Examinations to support the full curriculum framework from 2011.

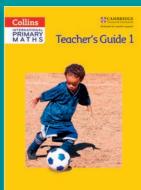


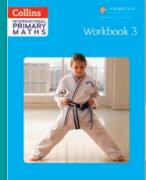
















Explaining metacognition

'Learning how to learn' is often defined as a process of discovery about learning. *Lee Davis, Deputy Director, Education*, explains some of the terms and principles you will come across when exploring this fascinating aspect of student development

Metacognition

The processes involved when learners plan, monitor, evaluate and make changes to their own learning behaviours.

Metacognitive knowledge

What learners know about learning. This includes:

- the learner's knowledge of their own cognitive abilities (e.g. 'I have trouble remembering dates in history')
- the learner's knowledge of particular tasks (e.g. 'The ideas in this chapter that I'm going to read are complex')
- the learner's knowledge of different strategies that are available to them and when they are appropriate to the task (e.g. 'If I scan the text first it will help me to understand the overall meaning').

Metacognitive regulation

Describes how learners monitor and control their cognitive processes. For example, a learner might realise that a particular strategy is not achieving the results they want, so they decide to try a different strategy.

Self-regulation

The ability to monitor and control our own thoughts, emotions and behaviour. The student will monitor, direct and regulate actions towards goals of information acquisition, expanding expertise and self-improvement.



Reflection

An active process of learning: more than just thinking or thoughtful action. It recognises that learning is not without dilemmas and issues, and encourages students to look at these issues from different perspectives, which aids understanding and the evaluation of a student's own assumptions and values. Ultimately, it is not a linear process, but a cyclical one, where reflection leads to the development of new ideas that are then used to plan the next stages of learning.

Meta-learning

An approach advocated by the author and academic Chris Watkins, whereby students are encouraged to 'narrate their learning', so that they are able to see their own role in it. The more students see their own role in their learning, the more they are able to plan, monitor and review. Then, the more they become an effective learner, the more they see other people and a range of contexts as important resources in their learning.

Self-study

The more students see their own role in their learning, the more they are able to plan, monitor and review Failure: the

GREATEST TUTOR

Journalist, author and former table-tennis champion Matthew Syed spoke at the Cambridge Schools Conference in the UK about what he has learned from highly successful organisations and individuals. What is common to all of them, he said, is that they must first learn to fail

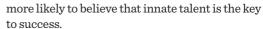
hen it comes to understanding our own learning and that of our students, one of the greatest predictors of success is our attitude to failure. This is the premise of Matthew Sved, author, journalist, broadcaster and one-time British table-tennis number one. To illustrate this, he asks the delegates assembled at the Cambridge Schools Conference in Cambridge on a sunny September day who has heard of David Beckham - and then reframes his question to ask who has not heard of him, as smiles of recognition spread around the hall.

Matthew has spent a lot of time with the footballer, as he ghost-wrote his biography. He found that Beckham has a huge capacity to learn from failure. When he was sent off in a crucial match in the 1998 World Cup, the mistake changed him, but for the better, making him learn and analyse his attitude to the game. He has since called it one of his 'top career moments'.

"Beckham was brilliant at learning from his mistakes. And learning from mistakes is resilience," says Matthew.

Learning from failure is a key component of what Matthew calls a 'growth mindset'. (This concept comes from Carol Dweck's 2006 book Mindset: The New Psychology of Success.) A person or organisation with a growth mindset is willing to try, fail, analyse and learn in order to get better at their chosen activity. This is opposed to a 'fixed mindset', where a person is

Right Matthew Syed. Below David Beckham: 'Brilliant at learning from his mistakes'



However, to learn from failure and build up that resilience, you must first be prepared to test yourself. And what is practice, if not trying something over and over again to work out why you're failing at it, and then putting it right? David Beckham certainly has a talent for football, but he didn't start his life being able to shoot into the back of a net every single time. That came from a huge amount of good-quality practice.

"Diligent practice, that wonderful journey of practice, was what made Beckham a fantastic freekicker. We learn by being stretched. Often when we're stretched we make mistakes. That's true in motor tasks, like football, but it's also true in cognitive tasks. Does a failure or mistake mean we have really failed - or show that we are learning?"

For children, helping them to understand the importance of a growth mindset in their attitude to learning is crucial, Matthew believes. "Suppose I'm a



"We learn by being stretched. Often when we're stretched we make mistakes. That's true in motor tasks, like football, but it's also true in cognitive tasks"



child that thinks talent's important. I think also that I'm supertalented. Can you see the risk there psychologically? 'I don't have to work hard. I'm a genius! I'm going to get to the top anyway.' The child is more likely to stop putting in the hard work that is a prerequisite to becoming successful."

"Suppose I'm a child that thinks talent's important. I think also that I'm supertalented. Can you see the risk there psychologically?"

He continues: "Children who understand neural plasticity, and who are given pictures of brains changing over time, start to think in a growth mindset way. They think: 'That person is good at history, but to become as good as them, I have to grow some more muscle. I need to practise. They know that muscles grow and they start to see the brain that way."

Success, failure and practice, then, are all part of the same system, and schools that understand this will produce more resilient students able to learn from their mistakes. Matthew concludes: "We need to create a culture where teachers are constantly learning about how to improve their performance, so they are surrounding the students with the messages to enable them to learn, to be resilient and to achieve their potential."

Find out more...
Matthew's books, Bounce and Black BoxThinking, are published by John Murray Press. Buy them via www.matthewsyed.co.uk

Below Increasing brain power requires practice in the same way as building physical muscles



Practice or perfect?

Try this exercise with your staff or students



 Read out loud the following digits to a group of people. Tell them not to write them down, but to remember them.

813709246105

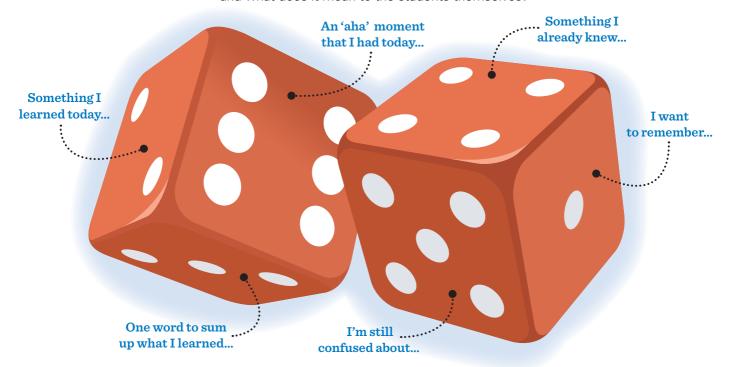
- 2. Ask for volunteers to recite the numbers, in the correct order, back to you. Do this three or four times.
- 3. Tell them that the average recall is five digits.
 Then ask them to tell you who has the greatest talent for memory among those who recited the numbers.
- 4. Say to them: "If I told you about a man who can remember 81 digits in this way, what would you say about him?" (Your likely answers are "He has a great memory", or "He has a talent for remembering numbers.")
- 5. Tell them the following story: a psychologist at Florida State University, Anders Ericsson, wanted to test the relationship between talent and practice. He took a normal man called Stephen, and did the above digit test with him. Stephen could recall four digits slightly below average. Then Anders gave Stephen 100 hours of good quality practice in memory skills. How many random digits could this below-average untalented person recall after that? 81.

The point?

"Ericsson said there seemed to be no limits to which ordinary people can improve their memory skill with practice," says Matthew. "You might think that Stephen is extraordinarily talented, but that isn't the case. When we witness high performance, we only observe a limited data set. We observe the performance and not what went into its construction: the practice."

The *power* of *understanding* learning

Schools across the world now devote class time to helping students reflect on how they are learning. But what's the benefit of this, and what does it mean to the students themselves?



n the end of every desk in every classroom in Takoradi International School in Ghana sits a dice. It stays there untouched until the end of the lesson. Then it's picked up by a student and rolled.

However, this isn't the start of a game. It's the beginning of a period of reflection that students at Takoradi are well used to. They take turns to roll the dice and briefly answer aloud a question based on the number rolled:

- 1. I want to remember...
- 2. Something I learned today...
- 3. One word to sum up what I learned...
- 4. Something I already knew...
- 5. I'm still confused about...
- 6. An 'aha' moment that I had today...

This is one of a number of engaging self-reflection tools that Takoradi uses. Others include 'mind sheets' – erasable tablets on which students answer a few questions about the lesson they've just had, and leave in a box in the corner of the classroom; and 'stop/go cards' – red on one side and green on the other, left on each desk so students can indicate whether they understand (green side up) or are in difficulty (red side up).

Mena Lokko, the school's Cambridge Coordinator, says: "We use a variety of engaging formative assessment tools, which we change from time to time to stimulate both the teachers and students. They're great because they provide critical feedback to teachers promptly. That means they can monitor and modify their instructional methods and their planners Roll up Students at Takoradi International School, Ghana, use dice to help them reflect on the lesson they've just had to meet the needs of individual students."

Schools around the world no doubt have similar tools. Whatever the tool, the ultimate goal, explains Mena, is that students are aware of their own strengths and weaknesses as learners. "So as teachers, we can set and monitor goals; and the students have strategies to choose from or switch to during learning activities. It helps develop higher learning and problem-solving skills," she says.

For a learning environment to be truly reflective, Mena adds, constant analysis must run through every aspect of teaching and learning, right through to the language used in the classroom. "Our teachers have questioning strategies that prompt reflective thinking specifically, they get students to respond to 'whys, hows and whats' in every lesson," she says.



"I believe that a student will always work better if they understand why they are doing something"

Dominique Massyn, student

Meanwhile on another continent. Cambridge International AS Level student Mohit Vakil from Mumbai, India, has taken active, reflective learning entirely to heart. "I think reflecting on the concepts we learn is very important," he says. "To develop as inquisitive learners, we need to critically evaluate the implications of the concepts we learn. Personally, I think this makes my learning much more interesting."

So what does that mean in practice for Mohit? What does he do to reflect on his learning? "After each class, we give feedback to the teachers about what technique was the most helpful. As a class we have regular discussions about what we learn," he says. But it doesn't stop there. "After coming home. I review the coursebook to reflect on what we learnt in class." Mohit understands that he is a visual learner. "For me, the concept is easier to grasp when you see it happen visually, so I like going online and using interactive simulations like PhET [phet.colorado.edu]," he says.

While not all students are such enthusiastic self-starters as Mohit, it's easy to see how much



they benefit from being equipped with the tools to analyse their own learning. South African

Cambridge International AS Level student Dominique Massyn, from Cape Town, says she is the type of learner "who will remember information when it makes sense to me or when it interests me". She goes on: "For

example, I love history because it helps me to understand why we are living in the way we do. By understanding the past, everything in the present makes a little more sense. I am the type of learner who will remember more when the

teacher explains it, rather

than self-studying."

Mohit Vakil India

Contributors

Mena Lokko

School, Ghana



Cambridge International AS Level student.

Cambridge Coordinator,

Takoradi International

Dominique Massyn Cambridge International AS Level student, South Africa

For both of these students, understanding their way of learning has unlocked further learning opportunities. Dominique concludes: "I believe that a student will always work better if they understand why they are doing something, and what they will get out of it. Reflecting on what I have learnt helps me to put my school work into perspective. It shows me that there is a reason to continue working hard."

How to embed reflective practice in your school



Helping students reflect on their learning is one thing, but how self-aware are you as a teacher? And how does your school see itself? To help us understand more about what being reflective means for teachers and schools, we asked teacher training coordinator *Glafki Kelly* and author *Professor Deborah Eyre* to give their advice

Remember who you're doing this for

Any professional development, including reflection on your own practice, must ultimately benefit the student, says Glafki Kelly, Subject Adviser and Examinations Manager at Pascal Education (Cyprus). "It is of paramount importance that teachers comprehend their own teaching style as well as their students' learning styles," she says. "Reflective practice means teachers are thinking continually about how to enhance learning."

Create your own vision of excellence

According to Professor Deborah Eyre, worldclass schools create their own unique vision for themselves. "You have to be prepared to challenge yourself, not wait for someone else to tell you whether you're any good," she says. That means being honest about the challenges in your own context and country, but also being more demanding of yourself than an external inspector would be.



"Reflective practice means teachers are thinking continually about how to enhance learning"

Contributors



Glafki Kelly is Subject Adviser and Examinations Manager at Pascal Education (Cyprus). She is responsible for teacher training at her school, as well as being Principal Internal Moderator for Cambridge IGCSE English as a Second Language.



Professor Deborah Eyre is an author and global educational leader. Her latest book, High Performance Learning: How to Become a World Class School, was published in January 2016. highperformancelearning.co.uk



Keep up to date

Reflective learning is a continuous process, says Glafki. And it has to be done actively, not passively. "In our school, staff keep themselves abreast of the news in professional development. We encourage them to show initiative, apply new ideas in practice and take responsibility for their learning," she says.

Have regular reviews

Staff at Pascal Education make time for weekly development and mentoring meetings. "This is when we review lesson observations, give feedback, review peer observations, and undertake peer assessment and self-assessment," says Glafki.

Assess each other

Glafki says that the regular meetings and, crucially, peer observations help to develop a robust sense of community among colleagues. "I try to monitor colleagues with an open mind, particularly when it's my turn to observe lessons," she says. "It's important that we trust each other."

Get recognition for professional development

"We believe that professional development is crucial to the improvement of the school and part of our obligation to students, parents and the community," Glafki says. "So we have introduced a Cambridge Professional Development Qualification programme (www.cie.org.uk/pdq). It encourages teachers to apply new ideas and approaches, evaluate their experiences, reflect on their outcomes and develop these further."

Above Regular and honest feedback from colleagues can develop a sense of community among staff

Guiding principles

Professor Deborah Eyre has found through research and experience that for teachers to be fully self-aware and confident to try new approaches, they need to be given the freedom to make their own decisions – and mistakes – in the classroom. She explains it in the following way:

"If [school leaders] try to tightly control teachers all the time you don't get the best out of them. Imagine you're in a fleet of ships. Every one of your teachers is the captain of their own little ship. If you act like the admiral on the biggest ship at the front, constantly looking backwards and telling them exactly where to go, how to get there, and that they have to stay in formation, you will de-skill them.



"You are offering advice but respecting that those people are good in their own right"

"You have to be more like a coastguard station. The coastguards are people who stay on shore, looking out for the safety of ships. They can radio to the ships and say: 'You're a little close to that sandbank, I recommend you take some action. You might run aground if you don't.'

"By doing this you are offering advice but respecting that those people are good in their own right. So you're trying to make them better rather than just find fault. You're saying: 'You all know how to be teachers, but what we need to do is work collaboratively to make everybody a better teacher.'"

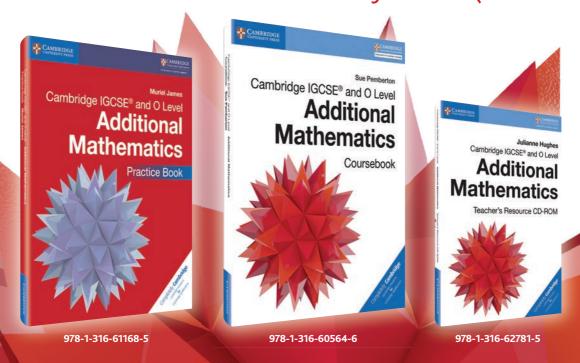






Cambridge IGCSE® and O Level Additional Mathematics Resources Supporting Active Learning

Endorsed resources developed for the Cambridge IGCSE® and O Level Additional Mathematics syllabuses (0606/4037)



These brand new resources feature:

- Classroom discussion activities which encourage students to discuss concepts with peers in more depth.
- Practice questions help students to consolidate their skills and keep track of their own progress and learning.
- Revision exercises draw on mathematical skills learnt in prior chapters to develop understanding.



for getting the most out of a Cambridge conference

The Cambridge Schools
Conference continues to grow.
Now we hold events all over the world, several times a year.
If you're heading to a conference soon, or considering doing so, we have the following tips for making sure that you get the most out of it.
To find out about upcoming
Cambridge Schools Conferences, visit www.cie.org.uk/conference



Come with your own ideas.

Conferences are great opportunities for sharing, so think beforehand about tips you could offer others and what practical questions you would like to ask.



Don't forget your business cards.

The conferences are a fantastic opportunity to network with other delegates.

1

Before you go, involve your colleagues at school.

What would they want to learn from the conference if they were also attending? Go through the programme with them beforehand and ask them what they would like you to take note of.

Join the conversation on social media.
Find out what delegates are talking about and learning. See page 4 for details of how to find us online



Download the conference app.

When you register, you'll be invited to download the app. This is a great way to organise your time and to keep up with the social side of the conference.

Be comfortable. The dress code is informal but smart. Remember that you'll probably be walking and standing a lot, so make sure you've got comfortable shoes.





Get to know the speakers before you attend. Read their biographies and the summary of their presentations on the conference website, and reflect on the key ideas they are likely to talk about.

Organise your note-taking.
What information do you need to take down and in what format? Presentation

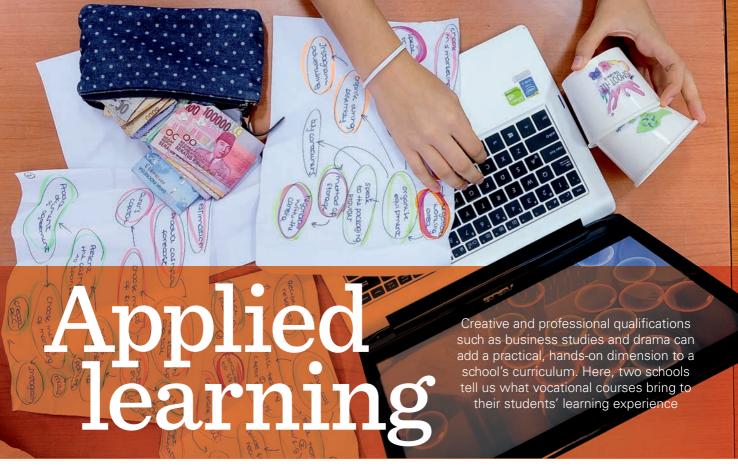
slides are available
after the conference at
www.cie.org.uk/conference

Bring your booking confirmation. You'll need to show your confirmation email (printed or digital) at the registration desk on your first day at the conference.





Plan next steps.
Having learned so much, how are you going to retain the information and what are you going to do with it?
Research suggests that you should review your notes soon afterwards, talk to a colleague back home and make plans for action.



s in so many international schools, diversity characterises life at Canggu Community School in Bali. Some 35 nationalities are represented here, according to science teacher and Cambridge IGCSE Coordinator Max Henson. "As a result, the kids are very tolerant of each other," he says. "People's differences are celebrated and cherished."

In the same way that variety is celebrated among students, so it is in the school's curriculum. It's important to Canggu that there is a rich choice of subjects available to students to allow them to develop different strengths. As expected, there are core subjects such as English and maths, and humanities such as history and geography. But Max says that creative and professional courses such as Cambridge IGCSE Design & Technology, Business, Computer Science, Physical Education, Drama and Music are very popular among students.

"I think some of the reason for that is the development of empathy when doing those subjects. The students are presenting to each other, doing shows or creating art galleries: emotionally they are showing a lot to their classmates. This is important across all subjects and helps them understand the world better, which is particularly relevant in the current global political landscape," Max says.

Certain vocational courses also complement the school's learning philosophy, which is underpinned



"The students are presenting to each other, doing shows or creating art galleries: emotionally they are showing a lot to their classmates"

Above and **below** Students at Canggu Community School present to classmates



by inquiry. "In the past we've also offered Cambridge IGCSE Enterprise, which really lends itself to that. The skills needed to run their own business are all inquiry-led," he adds.

Parents, too, are supportive of creative and professional courses, Max says. "Most of them see English and maths as most essential, but they don't look down on vocational courses. A lot of our parents are entrepreneurs. To them, those skills of business acumen, for example, or an understanding of design, are vital. They can see how they can be applied in real life."

Parents and students at Brookhouse School in Nairobi. Kenva. also see the benefits of applied learning. Cambridge International A Level Business Studies attracts the largest number of applicants in the entire school, according to Evans Ombui, Head of Physics and Examinations Manager.

"We attribute its popularity to the large number of parents who are actively involved in business," he says. "They consider this succession training."

Students doing business studies at Brookhouse are preparing for onward study and the world of work: this is the appeal of a professional course.

"Besides classroom learning, this course takes them out to businesses for on-the-job training," says Evans. "By the time they complete their Year 13 studies, the students are well prepared for both their examinations and the job markets."

What I learned from studying enterprise

Victoria Kosasie, Year 12, Canggu Community School (Top in the World for Cambridge IGCSE Enterprise)

"I liked Cambridge IGCSE Enterprise as it focused primarily on start-up businesses, rather than large business corporations. As more people are more likely to start their own business than go straight into a large business, I felt that this class was extremely applicable to real-life situations.

'My favourite aspect was the coursework, as it allowed me to experience the real struggles (and satisfaction) of running a business. It also developed organisational skills which I could use in every subject outside of enterprise.

"I don't plan to pursue business studies at university, but this subject has inspired me to start up my own company. I plan to use the skills that I have learned in this course not only for that, but for other management tasks as well."

Cambridge's creative and professional qualifications

These provide a solid foundation for those who already have a career path in mind and would like to specialise while at school, before progressing to university to continue their education in their chosen field. These qualifications are designed to build understanding of concepts as well as practical skills.

They introduce learners to the theory and concepts that underpin the subjects as well as providing a good opportunity to engage with the subject practically. The syllabuses also develop wider skills for the workplace, sought by employers around the world, such as problem-solving, communication, team-work and creativity. Learn more at www.cie.org.uk/creative-professional

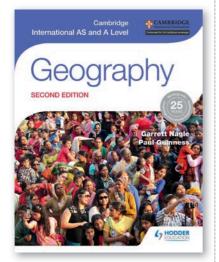
Subject	Cambridge IGCSE	Cambridge O Level	Cambridge International AS & A Level
Accounting	√		✓
Art & Design	√	/	√
Business	√	/	✓
CDT: Design & Communication		✓	
Child Development	/		
Commerce		/	
Computer Science	/	/	√
Design & Technology	✓	✓	✓
Drama	/		
Enterprise	√		
Fashion/Design & Textiles		✓	✓
Food & Nutrition	/	/	√
Information & Communication Technology	✓		✓
Information Technology			✓
Media Studies			√
Music	√		√
Physical Education	√		√
Principles of Accounts		✓	
Statistics		/	
Thinking Skills			✓
Travel & Tourism	1	/	/

Support for schools

The latest resources and developments to help you and your learners get the most out of Cambridge

Endorsed resources

At Cambridge, we work with publishers to endorse resources to support your teaching. Our subject experts thoroughly evaluate each of these titles to make sure that they are highly appropriate for Cambridge programmes.



CAMBRIDGE INTERNATIONAL AS AND A LEVEL GEOGRAPHY

RESOURCE: Student's Book **PUBLISHED BY: Hodder Education**

Trust the same author team behind Hodder's IGCSE Geography titles to take you through the complete updated Cambridge International AS & A Level syllabus (9696), in this endorsed textbook. The supporting write-in Skills Workbook enhances and deepens students' learning.

■ Visit: www.hoddereducation. co.uk/cambridgealevel Email: international.sales@ hodder.co.uk

CAMBRIDGE GLOBAL ENGLISH RESOURCE: Coursebook, Workbook and Teacher's Book PUBLISHED BY: Cambridge University Press

This course follows the Cambridge Secondary 1 English as a Second Language



curriculum framework and helps to prepare students for the Cambridge Secondary 1 Checkpoint English as a Second Language test. It offers opportunities to use language in a personalised way.

Visit: education.cambridge. org/globalenglish Email: educs@cambridge.org

CAMBRIDGE PRIMARY MATHEMATICS

RESOURCE: Six-stage course: Student's Books, Workbooks, Teacher's Guides.

DVDs. Online Resources **PUBLISHED BY: Collins**

Inspire students with a problem-solving approach to maths. These resources will help you deliver the Cambridge **Primary Mathematics** curriculum framework with confidence. There are six levels, enabling students to progress with a clear structure through each level.

■ Visit: www.collins.co.uk/ internationalprimarymaths Email: collins.international@ harpercollins.co.uk

What's new for exams officers

Exams officers play a vital role in ensuring that Cambridge exams run successfully, and it is important that they are well supported by us. We are working hard to improve this support in a variety of ways:



A new online training programme

New exams officers can now access quarterly webinars, designed to give them the information they need for their new role. We are also running monthly webinars and Q&A forums, where all exams officers can ask questions and learn more about regulations. Details are published in the monthly Cambridge Exams Officer eNewsletter.

Exams officer networking

Our online training now includes opportunities to network and interact, and to feed back to us on developments you want to see.

'How to' videos

For 'just in time' learning on processes and key regulations, exams officers can find lots of up-to-date, short and relevant videos on demand in the 'Exams officers' section of our website: www.cie.org.uk/examsofficers

The new-look Cambridge Handbook

All our regulations and administrative processes are now in one place! We have combined the Cambridge Handbook and Cambridge Administrative Guide into one Cambridge Handbook. You should have received a printed copy, but it is also available online at

www.cie.org.uk/examsofficersguide

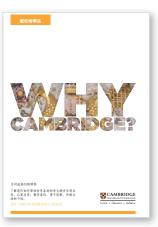
If you are a Cambridge exams officer, you should automatically receive the eNewsletter. If not, please email info@cie.org.uk



Resources in languages other than English

We want our resources to be as useful as possible, especially when communicating with parents. So we have translated some of the factsheets in our Communications toolkit into Chinese, Italian, Arabic, Spanish, Indonesian, Danish and other languages.

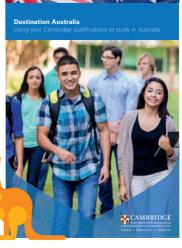
In addition, our 'Why Cambridge?' video is now available in Spanish, Italian, Thai, and with Chinese subtitles.







Find all our factsheets and videos at www.cie.org.uk/ toolkit



Destination Australia

Are your students thinking of applying to university in Australia? Our new Destination Australia guide will tell vou - and them - everything you need to know, including which universities accept Cambridge qualifications (almost all) and how to apply.

This is the latest in our growing series of destination guides, adding to the existing Destination UK and Destination USA. And look out for Destination India, coming soon.

Download them at www.cie.org.uk/recognition



Training and events

Providing global professional development opportunities for Cambridge teachers

How to improve your confidence in the classroom

Whatever their level of experience, most teachers benefit from a confidence boost every now and then. We can help. Our resources in the 'Teaching and learning' area of our website, such as 'Getting Started With' factsheets, are great introductions to topics and include practical tips. Our new range of Enrichment Workshops will help you focus on a particular area of teaching and learning, such as active learning, assessment for learning and removing barriers to learning.

In addition, here are some tips from our Professional Development team, based on their own experience and practice:

- Think about what you are doing well. It's easy to think only about the things which didn't go to plan. After every lesson, note down what you were pleased with. This will improve your self-confidence and give you some tried-andtested approaches for the future.
- Have a 'bank' of activities that you can apply to different topics. For instance, you might have a 'group essay' activity that works well with most topics where you



want the students to develop their higher-order thinking skills.

- Share ideas with others. For instance, set up a shared folder with your faculty colleagues. where you describe activities or approaches that work well.
- Get support. Consider 'buddying' with another teacher. Observe each other's lessons and share ideas, challenges and successes.
- Support others. Many teachers gain hugely in confidence by taking on a formal or informal role in supporting a less experienced colleague.

For more tips on reflecting on your own practice, turn to page 16

Helping hand

Use Cambridge's Professional Development resources and tips to give your confidence a boost www.cie.org.uk/ learning

New workshop for new leaders

Developing your leadership with Cambridge: An introduction is a new addition to the suite of Enrichment Professional Development Workshops currently available for Cambridge teachers.

It is the first in the Cambridge Leadership Series and is for new or recently appointed senior leaders in Cambridge schools with a responsibility for pedagogical leadership. The programme will introduce many of the key responsibilities of a school leader. helping new leaders to develop their skills and develop their personal vision for what effective schools look like. There will also be plenty of opportunity for networking, discussion and action planning.

This introductory workshop spans four days and explores the following themes:

- Vision and strategy
- Effective teaching and learning at a whole-school level
- Monitoring and quality assurance
- Effective professional development
- Curriculum planning.

For more on the latest courses, go to www.cie.org.uk/events

Find training

We offer a large programme of Cambridge Professional development. Our syllabus-specific Development workshops cover a wide range of

subjects at all levels, and our range of Enrichment Workshops further supports the development of teachers and learners. For more information on our upcoming training or to book a course, visit our training calendar at www.cie.org.uk/events



To get in touch, go to our Help pages at www.cie.org.uk/help or email us at info@cie.org.uk



The go-between

Producing high-quality resources for Cambridge syllabuses demands a rigorous process. Publishing Development Manager Rachel Wood works for the team at Cambridge International Examinations that liaises with publishers

comes in, especially when

it's for a syllabus we've not

y the time a resource reaches the bookshelves of a school, it's really been through the mill. It's about 18 months from proposal stage to publication. We work with world-class publishers. Hodder, Cambridge University Press and Collins publish "I still get a thrill when a book

the majority of our endorsed resources. but if we think another publisher has a really great resource, we'll definitely consider it. previously had resources for"

We try to get resources for as many syllabuses as possible. As well as, say, Cambridge IGCSE Maths, which is very popular, our core publishers publish for lower-entry syllabuses. We share advance information with them about syllabus development to make sure we have resources available for first teaching. We work with a number of publishers so that our endorsed resources suit different styles of teaching and learning.

When we get a proposal, we talk to our assessment colleagues to get their views on it. If the proposal is accepted, the authors write the book and, in due course, we get the proofs for review. We rely on specialist external consultants to review the proofs in detail. I was a textbook publisher for 25 years so I know the kind of issues that can cause problems, but I'm not a subject expert - one minute I

might be looking at Cambridge Primary English, the next at Cambridge International A Level Physics.

The most important thing is that the book covers the syllabus

to the right level of detail and to the high-quality standards we demand. Our consultants also check that the content is internationally focused. I look at the consultants' comments. and then send them to the publisher.

When we're happy, we issue provisional endorsement. The publisher prints the book and sends us copies for a last check and then, if all is well, we issue final endorsement. Our logo on the front cover is very meaningful to the publisher and, we hope, to Cambridge schools.

I still get a thrill when a book comes in, especially for a syllabus we've not previously had resources for.

My most memorable training event



Each issue, we catch up with a member of our global Teacher Trainer team

Colin Harber Stuart says:

"I was recently in Maseru, the capital of Lesotho - the small, landlocked mountain kingdom wholly surrounded by South Africa. It had been some time since a Cambridge trainer had delivered a Cambridge IGCSE Economics training event, and delegates came from each of the 10 districts in the country.

with a local tribal song being sung by everyone in the room. Delivering training after a long-haul flight can sometimes be tiring but the obvious hunger for knowledge on the part of the delegates was both humbling and inspiring. After exploring with them how economics can teach students how societies can resources, I am not sure who learned more - them or me!"



Cambridge trainer? Visit www.cie.org.uk/ trainerrecruitment to find out more about our trainer recruitment process

A view from... India



Carl Laurie (left), Principal of Christ Church School in Mumbai, was interviewed by Vinayak Sudhakar (right), Senior Manager for Cambridge in central India





Christ Church School Mumbai

Founded: 1815 Number of students: 265 on Cambridge programmes; 3618 following national curriculum Number of staff: 185 Little-known fact: The school was founded by the Bombay Education Society, which is also a publisher and translated academic books in Marathi and Gujarati as early as 1820

VS: Which Cambridge programmes do vou offer?

CL: We offer Cambridge Primary, Secondary 1 and Secondary 2 (Cambridge IGCSE). We started our Cambridge programmes in 2012, following an initial meeting with you and a seminar where you addressed parents of our students.

Why are you a Cambridge school?

It is an honour to be associated with an educational legacy of

over 800 years. I felt it an important step to provide the best of what's available in the world for our students and those who reside in the vicinity. It's a curriculum that provides much more than just teaching. It helps in widening the horizon of students. In a couple of words, it is 'an education'.

Above

Students at Christ Church School enjoy lots of opportunities to develop themselves outside their academic studies

What support do you receive from your regional Cambridge team?

They're excellent. It's so easy to get in touch over the phone or email. Any request for clarification

or guidance is always promptly dealt with. They are professional – and, I must add, they make one feel part of a family of professionals.

What makes you most proud of your school?

I am proud of Christ Church School because of its 200-plus years of history. It has adapted to the educational needs of a modern India. We are traditional but not afraid to adapt to the demands of a globalised education, so besides providing our students with national board exams we also provide them with Cambridge examinations.

The school is known in Mumbai for its sporting achievements. Tell me about some of those.

The desire of the students and parents to embrace the opportunities we provide is evident in the way our students do exceedingly well at inter-school, district and national level, and a few even on the international sporting stage. We have participants in fencing, taekwondo, archery, gymnastics and athletics, as well as football, cricket, table tennis and boxing. We are the only school in the city that hosts five inter-school sporting events.

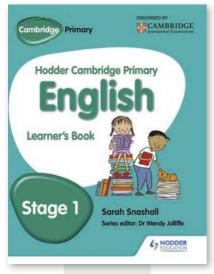
Can you sum up your school's ethos?

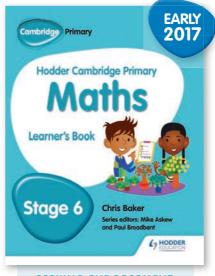
We endeavour to provide a complete holistic education. That means including academic, co-curricular, sporting, literary, community and humanitarian activities that will stand the students in good stead in a future where versatility, flexibility and multi-tasking will be crucial assets. Our students have responded to the opportunities provided and have used this platform to show their talent and creativity, right from kindergarten to secondary level.

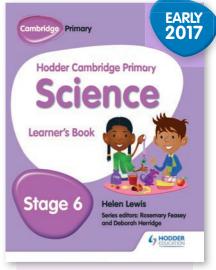
Would you like to be featured in this article? Talk to your local Cambridge representative, then email us at outlook@cie.org.uk

New resources for Cambridge Primary

Introducing learner and teacher focused resources for English, Maths and Science that support delivery of the Cambridge Primary framework, aiding preparation for Progression tests and the Cambridge Primary Checkpoint test.







Norking With

ENDORSED

SEEKING ENDORSEMENT

SEEKING ENDORSEMENT

Each course includes Learner's Books, Teacher Packs and Workbooks across six stages, which are ideal for use in class and for homework throughout the year as your core set of books. Digital Resource Packs are available for Maths and Science.

- Ensures full understanding of the subjects
- Develops learners' observation skills with innovative digital resources
- Focuses on the respected mastery approach for Science and Maths
- Encourages active learning
- Features the key pedagogical insight of experienced series editors



For more information about our course guides and videos for Hodder Cambridge Primary, visit www.hoddereducation.com/cambridgeprimary



Cambridge Schools Conferences 2017



"A jam-packed hall with educators and leaders from 36 countries. What a lovely sight and what an excellent opportunity to be a part of such a magnificent event."

Nazim Qureshi, Anand Niketan International School, India



We will be holding three conferences in 2017. Look out for details at www.cie.org.uk/conference



