PINEHURST SCHOOL
Our place

Cambridge, Pinehurst and New Zealand

Curriculum, assessment and choosing a school

In March next year, my elder daughter will be heading to university. She will come together with students from all around the world, each carrying with them their different qualifications as they move onto the next stage of their lives. Some qualifications are broader than others. Some are more rigorous. Some focus on critical thinking more than on the accumulation of knowledge. All of them reflect the societies that gave birth to them, and all are the result of long years of research, practice and sincere reflection on what it means to create a curriculum and to assess the learning that is at the centre of that curriculum.

In New Zealand, every young person has the opportunity to follow the NCEA pathway if he or she wishes. A small number of students have the chance to follow the IB programme, and some students have the chance to take the Cambridge pathway. All three pathways are good choices, and all three pathways will prepare students for universities in New Zealand, Australia, the USA, the UK and every other country in the world. In New Zealand schools, each pathway is being used with imagination and rigour to support students' learning.

At Pinehurst, our choice is to follow the Cambridge pathway, and this is what I want to talk through in this paper. I want to explain how it works alongside the New Zealand Curriculum in our school, how it supports an education that is both academically rigorous and holistic, developing the whole student, and how our students are prepared for the next stage of their lives in New Zealand and overseas, either in the workforce, at tertiary institutions, New Zealand universities, or at some of the best universities in the world, including those in the UK or the USA. I want to talk about how Cambridge provides us with rigour and structure, and how it allows us to be ourselves as well: caring, focused on the individual child and giving each young person the chance to fly in sports, music, debating, Young Enterprise, Dance, Robotics... you name it! I am going to talk about Cambridge, and I am going to talk about how it works at Pinehurst.

What "is" Cambridge?

Cambridge is a lovely city and a great university! And it is also a quick way to say "Cambridge Assessment International Education" (CAIE). It is based in Cambridge, and is owned by the University of Cambridge. It has been around since 1858 in one form or another, but they have changed the examinations a few times since then! Over 10,000 schools in 160 countries follow the Cambridge pathway, and this increases every year. It is also becoming increasingly popular in the USA. The pathway is British, but it is designed as an international curriculum, and it is known for its high standards and consistency.

Cambridge in the Primary School

There are three main strands to Cambridge in the primary school (Years 1-6), and Pinehurst teaches all of them from the first day a child sets foot in a classroom. We spend about half our time every day teaching reading, writing, mathematics and science. The children are assessed against an internationally recognised assessment system, and we use resources that have been approved by Cambridge.

In reading and writing, we begin with phonics-based teaching, which teaches children how to "decode" letters. It's a very effective way to make sure that all children have the ability to work out how to read, and then to apply it to their own writing. Every teacher uses the same system, and this means that nobody is left behind. As the children get older, we teach how language and literature works, and assess against Cambridge standards. We have a large number of different skills we are trying to develop in students, and we assess against these. If a child needs support in a particular skill, we know what help the child needs and we then help them to develop that skill.

In Maths, we use Cambridge resources that are "spiral" in design. This means that we keep revisiting the most important maths skills, but each time we do that, we introduce a higher level of skill or thinking. The Maths we teach makes sure that students have the core skills they need to apply their knowledge later on, and here too we have a very detailed set of assessment criteria that we use. Our maths is not as "inquiry-based" as it is in other systems, but we develop inquiry skills in other parts of the curriculum instead. Cambridge challenges our younger students at a higher level of mathematics skills than other curricula.

In Science, the Cambridge approach works in the same way as it does in English and Maths. We have a specialist Science teacher at Pinehurst, and we make sure that our children develop both the core investigation skills they need to have – we do as much practical work as we can – and we cover a great deal of knowledge and understanding as well.

This is Cambridge in our Primary School. Our children learn to read well, to write in a range of different ways, and to work at a high level in Mathematics and Science. All teachers adopt the same approach, and use the same, very well-structured resources that allow us to adapt the level to the needs of every student. This is important to us: we have small classes and good resources, and we have the Cambridge curriculum to show us exactly where our children need help and where they need to be challenged.

We have "GaTE" ("Gifted and Talented") classes for children who need extra challenge, and we use the curriculum to support those who need extra help.

Alongside Cambridge, we teach the New Zealand Curriculum. That means that we develop inquiry skills in our children in, for example, Social Studies lessons and in digital technology and coding lessons. We teach Art, Music (with a specialist Music teacher), Drama, Physical Education, Spanish, and both First and Second Language Chinese. We develop thinking skills, students' ability to relate to each other, their ability to manage themselves (this is an outstanding strength of the school), and we develop their sense of themselves as citizens of the North Shore, of Auckland, of New Zealand and of the world.

As you can see, then, "Cambridge" in our Primary school is part of a whole education that means much more than some exams. We assess children against international standards every year, and we are very proud of the results they achieve, but the assessment is just one part of a much bigger programme.

Cambridge in Years 7, 8 and 9

In the middle years, Cambridge continues to develop the skills students learn in the Primary School. In English, Maths and Science, we follow the Cambridge programme, using their resources to ensure that students are making the progress they need to make for the senior years. We do things a little differently to other schools, though.

Every English, Mathematics and Science lesson from Year 7 onwards is taught by a subject specialist and overseen by the College Head of Department. That's also true of every other subject, actually.

This means that the Cambridge programme in Year 7 is overseen by a teacher who knows what students need to learn in Years 10, 11, 12 and 13. As a result, we teach the Cambridge curriculum, but we teach more than the curriculum says we need to teach. We develop further the skills students are going to need in their senior years, and we even provide opportunities for some students to accelerate their learning, usually in Mathematics. We can do this because Cambridge is structured so well, and we know what students are capable of doing next. Because Cambridge subjects exist independently of each other, this means that a student can be accelerated in Mathematics but be working at the same level as his or her friends in other subjects.

Alongside English, Maths and Science, we also teach a programme that includes some of the Cambridge Global Perspectives programme. This is an essential part of the curriculum that teaches students what it means to be a part of the world. We do not assess it in Years 7-9, but we make sure students explore what it means to be part of New Zealand and a citizen of the world, both at the same time.

And, yes, we also teach the New Zealand Curriculum in these years. We have subject specialist teaching in Social Studies, Technology, Robotics / Digital Technologies, Art, Music, Drama, Spanish, Second Language Mandarin, First Language Mandarin and Physical Education. All of these subjects are overseen by Heads of Department who plan with an eye on courses in Years 10-13.

This means that, in Years 7-9 just as in the Primary School, we make sure that we develop students' inquiry skills and broader abilities in these subjects. This, for us, is the place to be: perfectly balanced!

Cambridge in Years 10 and 11: the IGCSE years

This is where things change, and the curriculum becomes a full Cambridge curriculum. With the exception of General Physical Education, every subject is a Cambridge subject. We are also unique in New Zealand because we have adopted the Cambridge philosophy in full.

1. We teach a full set of two-year (Years 10 and 11) courses at IGCSE. This is how they are meant to be studied.
2. Students follow eight examination subjects in Years 10 and 11. They also take General PE and Global Perspectives (which they can choose to take the exam in if they wish). Students in other schools take six subjects.

Why do we do this? Because we believe that students should follow a wide range of subjects until they are 16. This means that they keep their options open for the pre-university years, and it means that they develop a much wider range of skills than they will if they take NCEA Level 1 or Cambridge at another school (there is no International Baccalaureate course offered in Year 11 in New Zealand: at Kristin, Rangitoto and Diocesan, for example, students do NCEA Level 1 in Year 11). And because we take two years to prepare students, they cope very well with the exams.

It also means that our Cambridge curriculum actually works very well for students who don't find some academic work as easy other students. This is because they can make more choices and so can choose more subjects that they enjoy, developing a wide range of skills that will support them in the future. It also means that they can stay with one pathway all the way through, which isn't an option if they want to study the IB Diploma. If a student is finding a subject very hard, they can choose to enter the subject at 'Core' level.

For the more able students, our approach in Years 10 and 11 is ideal. They love the range of subjects that they study, and we even manage to accelerate some students so that they take one or two subjects a year earlier than other students. It's a flexible, challenging system, and students flourish as they study hard and keep their choices open for the future.

All students take English and Mathematics, and then make six choices from Biology, Physics, Chemistry, Geography, History, Art and Design, Drama, Music, Computing, Technology, Spanish, Mandarin Chinese First Language, Mandarin Chinese Second Language, Physical Education, Business Studies, Economics, and Accounting. We offer separate sciences at Year 10 and Year 11 because we know that this prepares students very well for the separate science subjects in Years 12 and 13.

Students are given an "IGCSE" certificate at the end of Year 11 that records the grade they receive in every single subject.

We are asked sometimes if the number of subjects means that students are overloaded with content and do not have the time to develop crucial skills. The answer is an emphatic 'no'. Firstly, we structure our courses over two years, so we can manage the number of subjects. Secondly, the Cambridge syllabuses are led by skills, just as they are in NCEA and IB. The difference is that the skills are explicitly connected to knowledge and understanding, and that there is (this is true) a bit more to learn. We find that students cope very well with this, and we think that the ability to deal with information and understanding is important too.

AS and A Levels: Cambridge in Years 12 and 13

In Years 12 and 13, the Cambridge curriculum becomes streamlined: it's time to focus on universities and the world of work. Students take four or five subjects in each year (they choose in partnership with parents and the school), and they can choose to focus on exactly the subjects that they enjoy and that they need to study in the future. All of the IGCSE subjects are available at AS Level, and we add Classical Studies, Digital Media and Design (a brand new subject) and Psychology to the choices as well.

In Year 12, students follow English Language or English Literature AS Level and make three or four other choices. In Year 13, they choose four or five subjects at either AS Level or full A Level. Over the two years, students will generally study five or six subjects. And every single course – Year 12 and Year 13 – is at University Entrance level. This is unique in New Zealand, and recognises the fact Cambridge AS and A Levels are all excellent preparation for university. In the NCEA and IB systems, students need to complete courses at Year 13 level before they are considered to be ready for university.

This means that AS and A Levels are quite challenging, yes, and we sometimes have a very small number of students who aren't able to cope with the examinations. In every case, we work with parents and students in the years leading up to Year 12, and make sure that we have a pathway in place for them.

For our other students, the Cambridge structure ensures that every student has pretty much the same experience, and parents and students can be assured that we use the internationally-recognised framework in the same way as we do from Year 1. In other words, we work out what students are good at or not so good at, and we support them to get better. Cambridge AS and A Levels have quite a bit of content, but they are exactly the same as qualifications at every level of the Cambridge system: they are framed as skills that students need, and the content is used to test the development of these skills.

Universities and Cambridge

We have a student at Massachusetts Institute of Technology. Four of the students I have taught or mentored in the last few years have been to Ivy League Universities, three of whom studied at Harvard University: all studied Cambridge IGCSEs and A Levels. These are some universities Pinehurst has sent students to in recent years:

Australia
Australian National University,
Monash University,
RMIT University
University of Sydney
University of Melbourne,
University of New South Wales,

Korea
Korea University, Korea
Yonsei University, Korea
KAIST, Korea
Konkuk University, Korea

USA
Massachusetts Institute of Technology (MIT)
University of California
University of Pennsylvania
Missouri State University
Santa Clara University
Converse College

Canada
University of Toronto

UK
University of Cambridge
University of Bath
University of Bristol

Europe
University of Applied Sciences and Arts, Basel, Switzerland

Many schools can point to the wonderful achievements of their students, and we are no different. We are very proud of all of them.

Cambridge is wonderful preparation for University study anywhere in the world. In New Zealand, all of our universities understand Cambridge AS and A Levels, and rate them highly. The top Australian universities also recognise them and rate them highly. In the United Kingdom, AS and A Levels are – as you would expect – excellent ways into courses. And in the USA, A Levels are so well-respected that some universities will even accept them in place of SAT IIs (the subject SATs). Indeed, there are a growing number of schools in the USA who use Cambridge, and all of the best universities have rated A Levels very highly for a long time. In China too, Cambridge is a rapidly growing system that is very highly-regarded.

Most importantly, Cambridge ensures that you are prepared for university study. Getting into a university is only the start of it: you need to be ready to succeed in your studies as well. And Cambridge develops the knowledge, understanding and skills you need.

Cambridge and Pinehurst

We teach Cambridge from Years 1 to 13 because:

1. It is rigorous
2. It is flexible
3. It supports teachers and is consistent in its high standards
4. It works for every student in Years 1-11, supporting and challenging within a robust framework
5. In Years 12 and 13, it is excellent preparation for university and for other future pathways
6. It is very well-resourced
7. It offers a balance between skills, knowledge and understanding
8. It builds, month by month, and year by year
9. Students and parents trust and understand the system.

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