Department for Education

Free school application form

Mainstream, studio, and 16 to 19 schools

Published: July 2016

Insert the name of your free school(s) below using BLOCK CAPITALS
CAMBRIDGE MATHEMATICS SCHOOL

Contents

The application form explained

Before completing your application, please ensure that you have read both the relevant *how to apply to set up a free school guidance and the criteria for assessment* carefully. Please also ensure that you can provide all the information and documentation required.

Sections

Declaration

The declaration must be made by a company member on behalf of the company/trust. The declaration section is found on page 8 of this form. All applicants are required to complete this section in full.

All applicants will need to complete sections A, B, C, E, H and I in full.

For sections D, F and G, the information you need to provide will depend on the type of group you are. Please refer to the relevant section of the *how to apply to set up a free school guidance document* and the *criteria for assessment,* for the information your group should include in these sections.

Section A asks you for applicant details in the Excel form.

Section B asks you to outline your proposed free school(s) in the Excel form.

Section C asks you for detailed information on the vision for your school(s) and is to be completed using the Word form.

Section D asks you for detailed information on your proposed education plan(s) and is to be completed using the Word form.

Section E asks you to evidence that there is a need for the school(s) you are proposing in the Word form.

Section F asks you to demonstrate that you have the capacity and capability to open the school(s) you are proposing and is to be completed using the Word form.

Section G specifically asks about costs. This requires the completion of the relevant sections of the Excel budget template.

Studio schools use a different Excel budget template than mainstream and 16-19 free schools.

Section H asks for information about premises, and suitable site(s) you have identified. This requires the completion of the relevant section of the Excel application form.

Section I is about your suitability to set up and then run a free school. The form is available here.

Failure to submit all the information required may mean that we are unable to consider your application.

Submitting Sections A to H

The completed Word and Excel templates and the budget plans need to be submitted by email to the department by the application deadline to: FS.applications@education.gsi.gov.uk. Your email must be no larger than 9MB in size. If your documents are larger than 9MB, please send multiple emails clearly indicating that the emails are connected (e.g. email 1 of 3).

Applications for a Studio School should also be sent to: applications@studioschooltrust.org.

The Word template should be between 50 and 100 pages long (depending on which type of group you are); formatted for printing on A4 paper; completed in Arial 12 point font; and include page numbers. Annexes are excluded from the page limit and should be restricted to CVs for key individuals. Please do not include photographs, images and logos in your application.

The contents of the budget Excel template and Excel application form are excluded from the page limit.

Please include the name of your school in the file name for all Word and Excel templates.

You also need to submit two hard copies (of Sections A-H and the budget plans) by a guaranteed method such as 'Recorded Signed For' post to: Free Schools Applications Team, Department for Education, 3rd Floor, Sanctuary Buildings, Great Smith Street, London SW1P 3BT. You may also hand deliver if you prefer.

It is essential that the hard copies are identical to the version you email.

Submitting Section I

Section I, i.e. the Personal Information form, is required for each member, director, and principal designate who has not submitted forms within the past 365 days; together with a list of those members, directors, and principals designate who have submitted Section I forms within the past 365 days. These need to be submitted by email alongside a copy of Section A (from the Excel template) to due.diligence@education.gsi.gov.uk stating the name of the school in the subject title.

Data protection

Personal data is collected on the Word and Excel templates in order to consider an application to set up a free school and will not be used for other purposes. For the purposes of the Data Protection Act, the Department for Education is the data controller for this personal information and for ensuring that it is processed in accordance with the terms of the Act. The department will hold all personal information you supply securely and will only make it available to those who need to see it as part of the free school application process. All personal information supplied in these forms will only be retained for as long as it is needed for this process.

Application checklist

Task to complete	Yes	No
1. Have you established a company by limited guarantee?	Y☐	☐
2. Have you provided information on all of the following areas (where applicable)?		
Section A: Applicant details	Y☐	☐
Section B: Outline of the school	Y☐	☐
Section C: Education vision	Y☐	☐
Section D: Education plan	Y☐	☐
Section E: Evidence of need	Y☐	☐
Section F: Capacity and capability	Y☐	☐
Section G: Budget planning and affordability	Y☐	☐
Section H: Premises	Y☐	☐
3. Is the information in A4 format, using Arial 12 point font, and includes page numbers?	Y☐	☐
4. Have you fully completed the appropriate budget plan(s) where necessary?	Y☐	☐
5. Have you included CVs in the appendices for all relevant individuals in the template provided and in line with the requirements set out in the criteria?	Y☐	☐
6. **Independent schools only*:** Have you provided a copy of the last two years' audited financial statements or equivalent?	☐	☐

7. **Independent schools only*:** Have you provided a link to your school's most recent inspection report and completed an externally validated self-assessment and governance assessment?	☐	☐
8. **Independent schools only*:** Have you provided the documents set out in the criteria document specifically around your current site?	☐	☐
9. **Re-applications only:** Have you changed you application in response to the written feedback you received, if you are re-applying after being unsuccessful in a previous wave, as set out in Section 4.4 of this guide?	☐	☐
10. Have you sent an email (of no more than 9 MB in size**), titled: **Free School Application - School Name: [insert]** with all relevant information relating to Sections A to H of your application to: FS.applications@education.gsi.gov.uk before the advertised deadline?	Y☐	☐
11. **Studio schools only:** Have you emailed a copy of your application to the Studio Schools Trust at: applications@studioschooltrust.org?	☐	☐
12. Have you sent two hard copies of the application by a guaranteed delivery method such as 'Recorded Signed for' to the address below? Free Schools Applications Team, Department for Education, 3rd Floor Sanctuary Buildings, Great Smith Street, London, SW1P 3BT	Y☐	☐

* Independent schools include existing alternative provision and special school institutions that are privately run.

** If your application is larger than 9MB please split the documents and send two emails.

Section I of your application	**Yes**	**No**
12. Have you sent: • a copy of Section A (tab 1 of the Excel template); and • copies of the Section I Personal Information form for each member, director, and principal designate who has not submitted one of these forms within the past 365 days; and • a list of those lead applicants, members, directors, and principals designate who have submitted Section I forms within the past 365 days by emailing scanned copies of Section I forms to due.diligence@education.gsi.gov.uk stating the name of the school in the subject title, including a full list of members, trustees, and the principal designate (if appointed); and a copy of Section A? (See guidance for dates and deadlines)	Y☐	☐

Declaration

****This must be signed by a company member on behalf of the company/trust****

I confirm that the information provided in this application is correct to the best of my knowledge. I further confirm that if the application is successful the company will operate a free school in accordance with:

- the requirements outlined in the *how to apply to set up a free school guidance*;
- the funding agreement with the Secretary of State;
- all relevant obligations and requirements that apply to open academies (e.g. safeguarding, welfare and bullying) – this includes statutory requirements (those that are enshrined in legislation) and non-statutory requirements (those contained in DfE guidance); and
- the School Admissions Code, the School Admissions Appeal Code and the admissions law as it applies to maintained schools. 16 to 19 applicants do not need to follow these codes, but must have admissions arrangements and criteria which are fair, objective and transparent.

I have fully disclosed all financial liabilities and the full extent of each/any debt for which the company, trust or existing school is liable.

I confirm that I am not and have never been barred from regulated activity within the meaning given by the Safeguarding Vulnerable Groups Act 2006. I further declare that all current members and directors of the company have confirmed to me that they are not and have never been so barred, and that if it comes to my attention whilst I am a member or director of the company that I or any other member or director are or have been so barred I will notify the Department for Education. I and all other members and directors of the company understand that the company's free school application may be rejected if a member or director of the company is found to have been barred from regulated activity.

I acknowledge that this application may be rejected should any information be deliberately withheld or misrepresented that is later found to be material in considering the application.

Signed: [redacted]

Position: Chair of company / Member of company (please delete as appropriate)

Print name: [redacted]

Date: 27.09.16

NB: This declaration only needs to be signed in the two hard copy versions of your application. Please use black ink.

Completing the application form

Section A – applicant details (use Excel spread sheet)

This section will need to be completed by **all** applicants. Please:

- complete the Section A tab in the Excel spread sheet; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

Section B – outline of the school (use Excel spread sheet)

This section will need to be completed by **all** applicants. Please:

- complete the Section B tab in the Excel spread sheet; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

Section C – vision

This section will need to be completed by **all** applicants.

Please:

- use the space provided below; and
- provide one version of this section, referring to individual schools or circumstances if you are applying for more than one school;
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

Section C1 – a credible proposal to deliver a high-quality free school and a clear rationale for establishing it in this area
Rationale and key features of Cambridge Mathematics School Cambridge Mathematics School will be a specialist sixth form college, with 100 places in each of years 12 and 13, offering students a unique opportunity to study A level STEM subjects in the North of Cambridge City. All students will be expected to study A level Mathematics, with the vast majority studying Further Mathematics. Students will then choose two additional options, from Physics, Chemistry, Biology, Computer Science and Economics. North Cambridge currently lacks any sixth-form A level provision: that means students, in an area containing wards of significant deprivation, cannot access challenging, high-quality academic post-16 courses without significant travel. This is ironic in a city which houses one of the world's foremost universities; effectively an arbitrary division has been created within the city that leaves students in North Cambridge unable to easily access a challenging A-level offer. Our proposal seeks to dramatically alter this situation by creating a prestigious institution and providing an exciting post-16 offer. We are proposing a radically different approach to sixth-form provision: a focus on a narrow subject field which allows for true specialism, focus and indulgence in the joys of the STEM curriculum; an institution which is state funded but which has strategic partners from the very best institutions including Cambridge University, Isaac Physics and Cambridge Mathematics.

Section C1 – a credible proposal to deliver a high-quality free school and a clear rationale for establishing it in this area

The school will offer a unique ethos where the whole community share a passion for mathematics and where collaboration, rather than competition, promotes ambition. The location is key as it links to the high tech industry in Cambridge and the surrounding area, as well as the incomparable resource that is Cambridge University. One of the school's key aims will be to inspire, enthuse and encourage our students to apply to read STEM subjects at the most prestigious universities.

Students will be encouraged to aim for study at Russell Group and Sutton 30 universities to study STEM subjects and will be given tailored guidance and advice in order to support them through making good choices and excellent applications. Our intention is to create a successful model that becomes the pilot school, which is then replicated in areas of similar or even greater need.

From gravity to DNA, microcomputers to the jet engine, the camera to round teabags, mathematics has shaped Cambridge's game-changing academic and business environment for over 800 years. The city has spawned and nurtured a vast range of high technology businesses in the past 50+ years and it has attracted other world-leading companies to set up operations here, including Amazon, Amagen, Apple, ARM, AstraZeneca, Huawei, Microsoft Research and Samsung, to name just a few. Every child in the City of Cambridge lives within three miles of an internationally renowned high tech industry that innovates, creates, inspires and changes the world on a regular basis.

Cambridge is internationally renowned for maths and science, both in the pursuit of academic knowledge and in the application of new technologies. It is therefore an ideal location for a specialist maths sixth form where young people will be given opportunities to develop the understanding and skills they will need to go on to study mathematical courses at prestigious universities. Cambridge Mathematics School will act as a bridge between sixth form and university, working alongside academics and

students at the University of Cambridge to inspire the next generation of STEM undergraduates. The close physical proximity of the university departments and colleges will mean that collaborating on a daily basis is a reality. This synergy will also offer research opportunities to the university. Attached are letters outlining the nature of the partnerships we have formally agreed between *Cambridge Mathematics, Isaac Physics* and *St John's College* (see letters in appendices). The outcomes will include:

- research opportunities that aim to improve educational outcomes by forming close working relationships between University led research projects and the Mathematics school such as how to increase the number of girls choosing STEM subjects;
- ensuring deep understanding of complex concepts for the young people studying at the school;
- offer additional research opportunities to the community at the University interested in developing evidence based teaching and learning models that enrich educational models across the country and beyond;
- offering specialist teaching and learning opportunities for surrounding schools without such access to specialist teachers;
- contributing to the development of new resources for the benefit of students across the country;
- offering PGCE placements specifically for a Mathematics/Physics bias;
- improved recruitment and retention of specialist STEM teachers;

Section C1 – a credible proposal to deliver a high-quality free school and a clear rationale for establishing it in this area

- greater collaboration between University departments, secondary teachers and projects in the local and wider area, including the FSMP, the Maths hub and other specialist providers that ensure excellent outcomes for young people.

By forming close working relationships between university-led research projects and the Cambridge Mathematics School we will offer many additional research opportunities to the academics interested in developing evidence-based teaching. There is a shared intention to contribute to the national, and international, agenda of making maths more accessible and exciting to a broader group of people.

We have already established our strategic partners and they share our vision about providing a sixth-form provision which is elite in its focus and using the very best pedagogical models and practitioners to ensure our students develop into outstanding thinkers and leaders in this field. Similarly they too wish to challenge the poor levels of social mobility and ensure that our admissions process identifies talent and develops it.

The Cambridgeshire Educational Trust's Cambridge Mathematics School is for highly motivated students aged 16-19 with a particular aptitude and enthusiasm for mathematics. The school will cater for the brightest and the best young mathematicians in Cambridge and the surrounding region, and in particular those students who may not otherwise have access to, or be in a position to benefit from, high quality mathematics teaching in the supportive environment that we intend to offer. This will not be a large organisation, but one in which every individual is well known. It will benefit from pastoral and academic mentoring from the highest calibre professionals.

Mathematical developments have underpinned the technological and information revolutions that have transformed the modern world, and yet the subject is far more than simply a valuable tool for scientists, engineers and financial analysts: it is a beautiful, powerful, enriching and immensely stimulating subject. The Cambridge Mathematics School will ensure Cambridge's future as an academic global force

includes the minds of those who call Cambridge 'home', building a truly inclusive global legacy for Cambridge.

The vision of Cambridge Mathematics School is simple:

- to foster opportunity;
- to deliver excellence;
- to cultivate future genius;
- to increase social mobility;
- to set alight Cambridge's brightest minds and especially those from the most disadvantaged backgrounds.

We aim to provide an education that:

- is both engaging and challenging, promoting academic excellence;
- inspires curiosity and motivates an interest in further study;
- equips students with a coherent understanding of mathematics and the disciplines in which it is most commonly applied;
- empowers students by developing their thinking, writing and problem solving skills;
- enables students to make informed decisions about their futures and effectively supports them to realise their ambitions;
- supports every student individually, through small class sizes, individual and regular feedback, and an open door policy for assistance that enables them to fully realise their potential;
- ensures the links between subjects are embedded carefully into the curriculum.

The focus on academic excellence is vital. Although we live in a region that is home to one of the most prestigious universities in the world, Cambridgeshire as a whole is one of the worst performing authorities in the country. The children in our county deserve to be in schools that excel. In addition, the educational landscape is changing, with new GCSE and A-level qualifications that are even more demanding and for which

students need to be consistently well-prepared. We believe that our proposed small, but focussed, sixth form can ensure that students of mathematics will achieve their full potential and be appropriately prepared both for A-Levels and university admission.

Cambridgeshire Educational Trust's overarching vision

Within the Cambridgeshire Educational Trust we are fascinated by education: that's why our staff voluntarily attend weekly training sessions and we know that what is just a vision for education in some institutions is a reality in ours. This enthusiasm and excitement will be a major asset for the development of our free school. Our aim is to realise the potential of all of our students and this is at the heart of every decision we make and is why we put what happens in the classroom at the centre of all our decision-making.

Our vision is for academic excellence and a genuinely fulfilling educational experience for all students. In our founding school (Chesterton Community College) we have a diverse socio-economic mix. The experience of every child in our care is considered carefully:

- the personalised mentoring each child receives from their form tutor;
- the detailed data we collate about each child which is shared using our online reporting system, so that from day one every child is known by everyone in the school;
- the access to highly qualified graduate support staff – our Progress Support Workers and Learning Mentors – who provide tailored support to help every student succeed; and specialist staff, working in outstanding faculties, who understand how children learn best.

Our faculties are strong because we are deeply committed to the professional development of teachers. Our teaching staff body is energised and cares about continually improving teaching and learning. All of our teachers attend the weekly

training sessions and are enthusiastic about how to shape the learning experience. We would establish these approaches from day one in our free school.

The Cambridgeshire Educational Trust currently manages one secondary school – Chesterton Community College. Our aim is to establish and manage two new free schools in Cambridgeshire by 2020. We intend to expand outside our current 11-16 provision. In addition to bidding for this sixth form school and another 11-16 school, we are also exploring with our feeder primary schools whether it would be an advantage for them to link with us in our multi-academy trust.

Opening a new school is a momentous step in the life of a community; we have the immense responsibility to create an institution that will go on to shape the lives and experiences of future generations within Cambridgeshire. We do not take that responsibility lightly and have reflected on our collective experience as educationalists to clearly state what we can bring to ensure that our new free school is a success from day one.

The synergy between Cambridgeshire Educational Trust and the Cambridge Mathematics School, in particular the proximity of our 11-16 school Chesterton Community College, will effectively support the successful delivery of the leading edge curriculum. By sharing policy, practices and expertise, the Cambridge Mathematics School will achieve the organisational benefits of a much larger organisation (expertise, experience, broad challenging curriculum, diverse pedagogy, access to outstanding CPD opportunities for staff, ability setting, individual support and tracking) in what is, in essence, a fairly small operation.

This proposal is unique in its offer. Whilst we have carefully considered the provision that exists in the other specialist Mathematics schools, and used much of their strategy in this proposal, we are excited by the opportunity that this exciting new way of doing things presents. We very much intend for the Cambridge Mathematics School to be a pilot school and for the Trust to look further afield for opportunities to open satellite campuses. The East of England urgently needs a network of high quality STEM

Section C1 – a credible proposal to deliver a high-quality free school and a clear rationale for establishing it in this area
provision and we very much intend that when we have a proven model we can replicate it in other areas of need.

Section D – education plan: part 1

This section will need to be completed by **all** applicants. Please:

- use the table below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

In the table below, please provide the proposed numbers in each year group at the point of opening and an explanation of how pupil numbers will build up over time. Please add additional rows/columns if appropriate. If you are an existing independent school wishing to become a free school, please use the first column to show how many pupils you currently have. If you are proposing more than one school you will need to complete a separate table for each.

If you are proposing to open later than 2018, please leave the relevant earlier columns blank.

	Current number of pupils (if applicable)	2018	2019	2020	2021	2022	2023	2024
Year 12		n/a	60	80	100	100	100	100
Year 13		n/a	n/a	60	80	100	100	100
Totals		n/a	60	140	180	200	200	200

Section D – education plan: part 2

D1 – an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

If you are applying for more than one school and they will all be similar, please provide one version of this section, referring to individual schools or circumstances, where relevant. If schools will be different, you may find it simpler to provide more than one version of this section.

All applicants will need to complete the table of subjects and hours. Please use the table below.

Subject/other activity	Hours per week	Mandatory/ Voluntary	Comments
A level Mathematics	7	Mandatory	This will be split between 50% taught (input from a specialist teacher) and 50% independent study supported by Graduate Support Assistants.
A level Further Mathematics	7	Optional	
A level Physics	7	Optional	
A level Chemistry	7	Optional	
A level Biology	7	Optional	
A level Economics	7	Optional	
A level Computer Science	7	Optional	
Level 3 Extended Project	3	Mandatory	This will be split between a specialist teacher, a Graduate Assistant and independent study.
PSHE and tutor time	1	Mandatory	
Additional problem solving/preparation for entrance examinations	1	Mandatory	
Sport	2	Mandatory	
Enrichment activities	2-5	Optional	
Voluntary/community work	2-5	Optional	

[Add more lines as appropriate]

All applicants will need to complete this section, but you will give us different information depending on which type of group you are. Please:

- use the space provided below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

The Cambridge Mathematics School curriculum

The Cambridge Mathematics School is for students with a particular aptitude and enthusiasm for mathematics. All students will study A Level Mathematics and will then choose two from:

- Physics A level
- Chemistry A level
- Biology A level
- Economics A level
- Computer Science A level

Students may study Further Mathematics in addition to their other A level subjects.

A few students may choose 5 A Level courses if they wish to study Mathematics, Further Mathematics, Physics, Chemistry and Biology. This offer will be limited to the most academically gifted students and will depend on there being available capacity in the optional subjects.

All students will complete the Extended Project Qualification, choosing from research topics that they have identified or maths and physics problems suggested by Cambridge University academic staff.

In year 13 they will complete A2 qualifications in mathematics and other A level choice subjects as well as their EPQ. They will also sit one or more of the extension papers that universities set to help differentiate between the very best candidates: the AEA (Advanced Extension Award) and Cambridge STEP (Sixth Term Examination Paper) qualifications are examples. They will also be invited to sit other extension papers, for example the Physics Aptitude Test, depending on which university applications they are making.

Students will have a tutorial session every week where PSHE will be delivered as well as students having the opportunity for pastoral mentoring. The tutor will play a key role in supporting students to choose career paths. The programme will be supported by

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

the activities that Cambridge University will offer including workshops, lectures, enrichment days, STEP tutoring, and careers advice. In addition students will take part in sporting and enrichment activities for at least two hours per week.

The curriculum will be designed to incorporate and develop successful projects being developed by Cambridge University. Currently this includes Cambridge Mathematics and Isaac Physics and we hope to also be involved in Isaac Chemistry as it is developed. We intend to work closely with these university projects to create an innovative curriculum that brings the disciplines of mathematics and physics into a single curriculum plan. The specialist teachers will use this to enable students to discover the many connections between those subjects. We intend to use the resources produced by Cambridge Mathematics (Underground Mathematics) and Isaac Physics projects as core curriculum resources. Underground Mathematics provides rich resources for teaching A level Mathematics and enables students to explore and understand the connections that underpin mathematics as well as inspiring curiosity and offering meaningful challenges to students. Students will be encouraged to embrace discussion and pose questions and reflect and collaborate in order to deepen their individual understanding. Similarly, the Isaac Physics project has been developed in order to put problem solving at the heart of physics learning and to ensure students have deep conceptual understanding of the principles they are discovering. We intend to work in close collaboration with the Directors of Underground Mathematics and Isaac Physics. They are both very supportive of our plans (refer to letters in appendices). We want to produce a ground-breaking curriculum that will inspire our students and that can be shared on both a national and international scale.

Throughout their time at Cambridge Mathematics School students will explore a range of ideas that are not strictly examinable but which are interesting and stimulating and which enable them to develop their skills as mathematicians, problem solvers and life-long learners. These will be drawn from a range of resource providers such as NRich and the FSMP. In addition, we expect to offer an extensive programme of enrichment for GCSE students from local schools.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

The School Day

The Cambridge Mathematics School will help to prepare students for independent study and life at university or work. We will expect all students to start the day together at 9.00a.m.

Students will be timetabled over six 50 minute lessons each day. The formal day will end at 3:30pm and students will have the option to stay later to discuss problems with their peers, engage in independent study, or speak to their teachers. Not every lesson will operate in the traditional sense: some will be given over to independent study and some to visits to, or talks from, Cambridge University lecturers. As students progress through year 12 and into year 13 their tutors will help them to make their own decisions about when they should be in school and when they might plan their time independently.

The table at the beginning of the section demonstrates the number of taught lessons in each subject per week. Each subject will have one of their lessons of curriculum time where students will be engaged in independent study, supported by a Graduate Assistant.

Mathematics

4 periods (50min) per week with specialist teacher plus 1 period with Graduate Assistant and 3 independent study periods. An additional 4 periods with specialist teacher for Further Maths, plus 2 periods with Graduate Assistant and 2 periods independent study.

In their mathematics lessons students will be encouraged to put forward their own ideas and build them, either independently or collaboratively, into powerful and general methods. Specific lessons will be dedicated to improving students' ability to solve difficult, abstract problems and developing their ability to explain their ideas confidently and coherently, both orally and on paper. The pedagogy will be rooted in conceptual understanding and the curriculum will be designed to stimulate curiosity and elicit the

discovery of ideas. Mathematical rigour will be expected as standard, as will ensuring students have an understanding of the logical connections within the subject.

Physics

4 periods (50min) per week with specialist teacher plus 1 period with Graduate Assistant and 3 independent study periods.

In their physics lessons students will learn about the strange and wonderful world of quantum concepts and develop an in-depth knowledge of electricity, vectors, forces, energy and waves. Where many students of A-level physics must satisfy themselves with qualitative explanations that are often awkward and unconvincing, students will learn to understand physics using its natural language, mathematics. The curriculum will be rich in problem-solving as we believe that, to master physics and thrive both at university and at work, students need to be able to apply principles in situations that are non- routine.

Chemistry

4 periods (50min) per week with specialist teacher plus 1 period with Graduate Assistant and 3 independent study periods.

Students will learn that the principles of chemistry underpin our understanding of the world around us and are relevant to all areas of science, from the chemical processes in living organisms to the formation of stars millions of miles away. We intend to deliver a chemistry curriculum that teaches students how to find solutions to problems that concern society and train them to possess an adaptable and an analytical cast of mind.

Biology

4 periods (50min) per week with specialist teacher plus 1 period with Graduate Assistant and 3 independent study periods.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

The biology curriculum will empower and enable students to understand life. Students will learn how to make sense of the complexity of many life processes and mechanisms and to analyse, discuss and make sense of strange, surprising and sometimes unusual observations. Of course, biology is a much wider science, even at its core; many of the most exciting developments in biology have in fact come from the overlap between different scientific disciplines so combining biology A level with mathematics and other science subjects will allow students to fully benefit from exploring these overlaps.

Computing

4 periods (50min) per week with specialist teacher plus 1 period with Graduate Assistant and 3 independent study periods.

Computing has been fundamental to many of the exciting scientific and technological advances of the 21st century; from modern conveniences such as Oyster cards, to DNA sequencing, or number-crunching data generated by the Large Hadron Collider.

Computing lessons will focus on developing the ability to think computationally. We will use computational problems from mathematics and physics to motivate key ideas in programming such as loops, conditionals, data structures and data types. Topics such as set theory and graph theory, which lie within decision mathematics, find important applications when understanding how to write code that is efficient and reliable.

Students will learn to program, using the Python language. They will study what algorithms are, how they work and how to make use of them, and how to bring this knowledge into mathematics as a powerful way of solving problems.

Economics

4 periods (50min) per week with specialist teacher plus 1 period with Graduate Assistant and 3 independent study periods.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

In A-Level economics we will tackle key questions. In our study of macroeconomics we will concern ourselves with understanding and questioning large-scale economic factors affecting whole countries and the world, including interest rates and productivity. In our study of microeconomics, we will look closer to home, at the actions and decisions of individuals and groups including questioning how are prices set, and why. How do producers know how much to produce? Why are some markets inefficient, and what does the government do to intervene?

Although econometrics is not part of the formal A level curriculum, we will include an introduction to this area of study as it is a clear application of mathematics which will enrich the course.

Extension

All students will be prepared for entry to the Senior Mathematics Challenge and the Physics AS and A2 Challenges as part of their supervised study periods. There will also be optional support to enter the Mathematics, Physics and Informatics Olympiads.

Students at Cambridge Mathematics School will be challenged in each and every lesson. We will also have regular sessions dedicated to extension: here students will be prepared for challenging examinations including Oxford and Cambridge admissions tests. This will be delivered through a combination of either STEP weekends or timetabled into weekly slots held at, and delivered by, St John's College, Cambridge.

We will also make use of online discussion programs, as well as the rich support offered by Universities such as practice materials as well as support and resources offered by organisations such as the FSMP.

The Extended Curriculum

Cambridge Mathematics School aims to develop a broader set of skills than is possible through A-levels alone.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

The Extended Project Qualification

1 period per week, alternating between a teacher from the core staff and Graduate Assistant alongside an expectation that students spend an additional 3 hours per week on their projects. Students will also benefit from academic mentors from St John's College where this is appropriate (according to need).

The Extended Project Qualification (EPQ), equivalent to half an A-level in scope and in UCAS weighting, is an opportunity for students to complete exciting and independent work in a field that interests them. Many students will choose to create or design something, for example in the fields of engineering, software development or robotics, and the school will work with local businesses and entrepreneurs to utilise design laboratory spaces such as the Barclays Eagle Lab Maker Space to enable such projects. Other students will choose to continue to develop their knowledge of chemistry or biology, or undertake a project in the humanities, and the EPQ is a novel way to do so. Every EPQ requires a formal write-up as well as a presentation, and thus provides an excellent opportunity to develop communication skills and literacy.

The core staff will act as tutors to students and will support them to make the best decisions about their EPQ. This will mean that the tutor supports the student to choose a title that is clear and specific with a sharp focus on the project - for example a specific research question, a testable hypothesis or a design brief. The title will lead to research and a process of development work that takes a significant amount of time (around 80 hours). This will mean encouraging and supporting students to work independently on their projects regularly throughout the school year. The tutor will ensure that there is an agreed set of clearly defined objectives which can be evaluated. The tutor will need to establish that the work is of the correct level (comparable to A level study) and encourage the student to approach the project in ways that might differ from traditional study. For example they might explore the ethics and science associated with the topic of human cloning

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

Problem solving

Students will meet as a small group once each week to develop their skills in problem solving. This will mirror the tutorial system that is so successful in prestigious universities and will be staffed by a mixture of volunteer graduate and undergraduate students, representatives from local businesses and school staff. The problems set will be unusual, designed to encourage creativity as well as skill in communicating mathematical ideas. This programme is not only intellectually stimulating but provides vital preparation for university learning.

Care, Guidance and Support

Excellent care, guidance and support is integral to the success of our students. Each student will be assigned a tutor (with a maximum of 15 tutees in each tutor group). The groups will combine both year 12 and 13 allowing tutors even greater time to focus their attention on the students at key times in the year, such as applying to university. Tutors will get to know their students very well. They will monitor students' well-being and their academic attainment and support them in their journey from young person to young adult.

Students will develop personal, social and employability skills as well as academic skills, knowledge and understanding. Tutors will assess the skills of their tutees and support them to improve those skills that are in need of development and direct them to appropriate activities. We intend to draw on the support offered by 'Form the Future' who produce 'events that cover both careers inspiration and employability skills'. Iin addition will draw on the skills of the pastoral mentors St John's College will offer. Students will also benefit from a series of talks from university staff, speakers and lectures from local businesses and the opportunity to take part in mock interviews in order to best prepare them to communicate well in an interview situation.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

Careers

There is a perception that people who are good at mathematics go on to become either accountants, teachers, or academics. The reality is that, in the modern world, mathematically well-trained minds go into a hugely diverse range of different fields and industries. We will support every Cambridge Mathematics School student to do some form of work placement or experience during their two years at the school. This will usually be completed in the Summer Term of year 12. We will work closely with organisations such as 'Form the Future' who will provide support with how to look for opportunities and can assist students in approaching those companies. Students will also be encouraged to take part in voluntary work in the local community.

Progression to University

With the help of the experts at Cambridge University we will help students to select the courses and universities they want to apply for.

Spring Term (year 12): we will put on a sequence of talks and visits designed to help students decide what course they want to apply for.

Summer Term (year 12): we will identify at least three different universities that students should consider applying for and encourage them to attend those open days. We will take all our students to the Cambridge University events aimed at attracting students to apply. Disadvantaged students will be supported with the costs associated with travel using the additional funding the school receives for them. We will provide detailed guidance and support about the application process, and in particular the personal statement.

The staff and students at St John's College, Cambridge University will provide admissions and careers advice and provide pastoral and academic mentors to inspire and encourage sixth form students to apply to prestigious universities. University staff will train, guide and support CMS staff to ensure they gain significant and successful experience of guiding high-attaining students through the UCAS process.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

Autumn Term (year 13): students will finalise their decisions, with our advice, and submit their applications.

Alternatives to University

Tutors will work closely with all their tutees to ensure that they move onto a career path that is the best one for them. This might include researching appropriate job opportunities, gap year opportunities or university entrance. Whilst we expect the majority of our students to choose a path that takes them to a prestigious university we are excited by the opportunities that are currently being developed in the field of Higher Level apprenticeships and are currently seeking to build links with industry partners with an intention of leading the development of such routes to employment.

Clubs and Societies

Lunchtime and after-school clubs and societies are an excellent way for students to develop their interests. We expect the students to lead the plans in developing clubs that inspire and interest them. This could build on the already successful clubs at Chesterton Community College. We anticipate offering Robotics Club, Engineering and Design club, Bridge Club, Drama Club, Board Games Club, Film Society etc. Some students could also choose to take part in the Duke of Edinburgh Gold Award Scheme. Some students will either run or support clubs at the KS2 and KS3 Trust schools. Students will be encouraged to attend open lectures at Cambridge University.

Sport and Exercise

Our programme of sport is designed to encourage all students to take up a form of exercise that they enjoy and that will help them to live healthy lives.

The school will make use of Chesterton Community College and local facilities to provide options that are all within walking distance of the school. Students will be

expected to create a personalised programme that meets their interests and is beneficial to their health and fitness. This might involve working with a sport instructor from Chesterton Sports Centre. For example, students might choose to play football, engage in a fitness programme at Chesterton Community College's sports centre fitness suite, go for a walk or a run, play table tennis, learn golf etc. We intend this to be for a minimum of two hours per week.

Approaches to meeting different needs

At Cambridgeshire Educational Trust we believe that high quality teaching, appropriately differentiated or adapted for the diverse needs of all learners, is the first step in responding to possible special educational needs: essentially 'quality first' teaching. Teachers plan their lessons using students' prior achievement levels, differentiating tasks to ensure progress for every student in the classroom. This is in accordance with the Teacher's Standards (2012) which state that it is every teacher's responsibility to "adapt teaching to respond to the strengths and needs of *all* pupils" and with the SEN Code of Practice (2014): "teachers are responsible and accountable for the progress and development of the pupils in their class, even where pupils access support from teaching assistants or specialist staff".

Where students need additional support to access learning, the SENCo will be responsible for ensuring that the support is appropriate and of a high quality. This will be personalised provision and may include assistive technology, High Level Teaching Assistants working alongside a student, or exam access arrangements. Additional curriculum time will be put in place where appropriate, for example study skills sessions where a student is supported by a Graduate Assistant.

How will the designated Trust SENCo assess students' needs?

On entry to the school this will be achieved by:

- reviewing EHCP plans;
- discussion with parents or students who raise concerns during pre-admission and admission processes;

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

- diagnostic assessment by our specialist teacher;
- via discussions with feeder secondary schools.

When students are already at the school we know they may need additional support for their special educational needs if:

- it is clear that a student is not making expected levels of progress;
- observation of the student indicates that they have additional needs in one or more of the four broad areas of need: communication and interaction; cognition and learning; social, emotional and mental health; sensory/physical;
- screening, such as that completed on entry or as a result of a concern being raised (using screening tools and tests such as CAT4, Wiat II, WRAT and WRIT), indicates gaps in knowledge and/or skills;
- concerns are raised by parents/carers, external agencies, teachers, or the student's previous school, regarding a student's level of progress or inclusion;
- a student asks for help.

When it appears that a student may need additional or different support we will follow the approach outlined in the SEN Code of Practice (2014) which recommends a four-stage cycle of action, known as 'Assess – Plan – Do – Review'. The curriculum and the learning environment will be adapted further by the class teacher to reduce barriers to learning and enable the student to learn more easily. These adaptations may include strategies suggested by the SENCo and/or external specialists and, if appropriate, provision of specialised equipment or resources. Students are able to enter and exit this cycle of action according to their needs and progress during their time at the school. This system operates as follows at each review stage:

- if a student is shown to have made sufficient progress in their specific area of need so that they no longer require provision that is different from or additional to normal high quality teaching they will no longer be categorised as having SEND support and will return to having their progress monitored within the mainstream of students without SEND;

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

- if a student has not made expected progress, despite the school having taken action to identify, assess and meet the SEND needs of the student, the school and/ or the parents, carers and student may request an Education, Health and Care Plan needs assessment by the Local Authority. This may be the case for a very small number of students whose needs are significant and complex and where the SEND support required to meet their needs cannot reasonably be provided from within the school's own resources. If this assessment leads to the student having an Education, Health and Care Plan, we will hold review meetings and complete the appropriate paperwork in school, working in conjunction with the Local Authority.

Child Protection and support for Looked After Children

The SENCo will also have responsibility for looked after children as well as being the designated Child Protection Officer. This will involve liaison with children's services, creation of personalised support plans and disseminating information to teaching and other relevant staff and external agencies

Supporting EAL learners

The Trust will identify named staff for EAL provision. They will have responsibility for:

- assessing the skills and needs of students with EAL and communicating this information to teachers so that they can provide for students' needs
- equipping teachers and teaching support staff with the knowledge, skills and resources to be able to support and monitor students with EAL;
- monitoring students' progress systematically and using data to inform classroom management, curriculum planning and the setting of targets;
- maintaining students' self-esteem and confidence by acknowledging and giving status to their skills in their own languages.

This support will be financed through the top slice funding. The trust will allocate specialist support via an annual audit of need. This will be reviewed throughout the academic year and adjusted as required.

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake

Supporting Disadvantaged learners

Highly qualified graduate support staff – our Progress Support Workers and Learning Mentors – will provide tailored support to help every student succeed. The cost of this will be met from the additional funding that these students attract and has not been included in the financial model as this figure is unknown.

This will include

- additional pastoral mentoring
- encouraging high levels of attendance;
- liaising with teachers;
- supporting student organisation;
- encouraging liaison with home;
- helping with consolidating what is learnt in lessons.

Admission to the Cambridge Mathematics School

Students will be selected on merit according to demonstrated mathematical potential. This will include predicted GCSE grades as well as other measures of potential such as the UK Mathematics Trust, Intermediate Challenge / Pink Kangaroo. We will also consider students' potential for success in the specialist setting. We expect this offer to be

Either: grade 8 or 9 in GCSE Mathematics

Or: grade A or above in Level 2 Further Mathematics (AQA) or FSMQ Additional Mathematics (OCR)

Or: certificate of merit in UKMT Pink Kangaroo

Either: grade 7, 8 or 9 in GCSEDouble award science

Or: grade 7,8,9 in at least two out of three triple science GCSE*

D1 - an ambitious and deliverable curriculum plan which is consistent with the vision and pupil intake
Grade 9-5 in GCSE English *students must have achieved at least grade 7 in a science discipline in order to then follow that as an option subject Interested applicants who have taken alternative international qualifications will be considered on an individual basis. Where appropriate, we will give students an interview of significant length during which it is possible to determine their mathematical capacity. This may be different to predicted GCSE grades. This may be appropriate, for example, for neurodiverse students such as those with Asperger's Syndrome.

D2 – measuring pupil performance effectively and setting challenging targets

If you are applying for more than one school, please provide one version of this section, referring to individual schools or circumstances where relevant.

All applicants will need to complete this section, but you will give us different information depending on which type of group you are. Please:

- use the space provided below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

D2 – measuring pupil performance effectively and setting challenging targets
Cambridgeshire Educational Trust believes in setting aspirational targets for all students, regardless of their starting points. We intend to replicate the highly successful structures currently used at Chesterton Community College. These include academic targets, attendance targets and an expectation that behaviour will be excellent. We

have set these SMART targets as the baseline for success, modelled on the extremely successful outcomes achieved at Kings Maths School, London.

100% A*/A/B in Maths, Further Maths

85% A*/A/B Physics, Chemistry, Biology. Computer Science, Economics

80% offered places at Sutton Trust 30

Academic targets

We will use both GCSE and CAT4 Data to create aspirational targets before students arrive at the start of Year 12. These are currently known as 'Potential Grades' at Chesterton and we intend to replicate this language as it has proven to be clearly understandable and highly motivating. The minimum expectation will be generated through the ALPS system before being adjusted upwards if other measures indicate that a student has greater potential. For students with GCSE results, the ALPS baseline will be compared to the highest of either the FFTD (top 5%) grade (which will then be adjusted up if there is a 45% or higher chance of a student achieving a higher grade) and the CAT 'grade if challenged'. For students without GCSE results, the ALPS baseline will be compared to the CAT tests and then reviewed after half a term. These targets will be set by the pupil performance information team at the trust level and will be used by the school Principal to hold teachers to account.

The academic data will be used by the SEND team and the Head of Year 12, alongside personal profiles of students provided by their secondary schools, to identify and plan effectively for students with additional needs. We will also use KS4 question level analysis to identify and address key gaps in individual students' knowledge.

Every teacher needs to know what students are capable of from the very first day and we will use our innovative online tracking system (already embedded at Chesterton) to capture and share this data with all stakeholders. This will include teachers, students

and parents. Teachers will use this information to plan high quality teaching, and interventions where appropriate, based on the needs of the students in their classes.

Formal progress updates will be generated every term using high quality assessment information collected in subject areas. These progress updates will be shared with students and parents through the web-based system. This will ensure that students and their parents are given detailed information about how to improve in each individual subject. The Senior Team will use these progress summaries to hold Directors of Subject to account. The data will be used alongside formative evidence including learning walks, book scrutiny and lesson drop-ins.

The 'challenge potentials' system will ensure that there will be no opportunity for students to coast. Any student who achieves above their potential grade for two out of three progress checks will have their Potential Grade adjusted upwards.

If a student achieves their Potential Grade for three consecutive inputs, their potential will be reviewed by the subject leader and class teacher. In addition, a student's potential can be moved up if a class teacher makes a request and provides supporting evidence, for example at least 3 assessment results. Outstanding pastoral tutors will monitor students' overall performance across all subjects and help ensure students realise their potential. Every student will meet their tutor at least once every half term for a formal review of progress.

Attendance targets

The attendance target for the school is 97%

Attendance at Chesterton has been consistently higher than all other secondary schools in Cambridgeshire for a number of years. The school's attendance is in the top 10% of all schools in the country. The Trust is committed to the principle that excellent attendance is crucial to excellent outcomes for students. The highly successful systems for tracking attendance at Chesterton will be employed. A highly skilled team including a Senior Leader, an Attendance Officer, and form tutors, will work together to ensure excellent levels of attendance. Swift action will be taken when a student attendance dips and personalised interventions will be put in place; for example all

students will be expected to attend monitoring meetings with their parents. Where a student is absent due to long term illness, online catch-up sessions will be made available. The system used for tracking progress data also captures attendance figures so all staff can use this information when planning interventions. This information will be available to parents through our live tracking system.

Behaviour targets

The same high standards of behaviour evident in Chesterton will be expected across the Trust. Our innovative system will be used to share information about behaviour. This will allow us to both celebrate success and alert key stakeholders to issues where a student's behaviour does not meet the expected standard. 'Push' data will inform parents and key members of staff of incidents on a daily basis. This will allow us to engage effectively with parents, ensuring that maximum use is made of parental support. The instant notifications of behaviour events will allow students and staff to celebrate success. This will be achieved in a number of ways including meetings with Directors of Subject, celebration assemblies led by senior leaders, certificates, opportunities to become student leaders, for example through becoming prefects/mentors/enrichment leaders at our partner schools.

Our web-based data tracking system captures information about behaviour allowing leaders to quickly recognise key individuals, or groups of students, who require additional support and to identify their individual needs. This allows targeted interventions to be designed and delivered in a timely fashion. In the rare instance that a student exhibits poor behaviour this will be dealt with swiftly and effectively using a stepped methodology. Students will be supported through a variety of programs based around the restorative approach. This will enable them to become reflective learners and continue on their journeys towards becoming successful, well-adjusted young adults who are ready to embrace the challenges of higher education.

Behaviour for learning will be a key feature of the Cambridge Mathematics School. One of the central tenets of the school is to prepare students for life beyond FE and, to that end, students will be encouraged to demonstrate a high level of self-motivation, taking control of their own learning. One of the biggest challenges in moving from

D2 – measuring pupil performance effectively and setting challenging targets

GCSE to Advanced Level study is coping with the high levels of personal organisation and communication that are needed to make a success of sixth form life. We recognise that not all students can adjust to these demands as quickly as others so, in addition to the support provided by tutors, we will also expect graduate learning mentors to advise and guide students to manage their learning more effectively. There will also be a number of study skills days arranged to enable students to identify how best they learn.

Furthermore, we recognise that the transition to the sixth form style of learning will only happen if teachers adopt the right approach in their teaching. Teachers will receive training in the latest pedagogical approaches and will be expected to keep up to date with the latest research. Our strong links with the university – particularly the Faculty of Education and the Mathematics Faculty – will help facilitate this. Chesterton's current CPD programme is comprehensive in its scope, whilst recognising staff workload pressures. Every Monday morning starts with a training session for all teaching and support staff. Faculty meetings are focussed on training too. 15-minute sessions on a wide range of pedagogical practices are offered once a week so that staff can simply drop in after school if they wish. Our appraisal observations record the impact of this training. This model would be easily transferable to Cambridge Mathematics School.

The Cambridge Mathematics School will provide the necessary resources to encourage a more independent approach to learning. Students will be expected to bring a personal learning device to school. Students in receipt of free school meals will be provided with the device free of charge. In addition, computers will be available. These will be equipped with a wide range of software packages including Python, Little Man, MS Office and Visual Studio.

Quality of teaching and learning

The quality of teaching and learning will be evaluated through a combination of termly monitoring reports at subject level and appraisal at the individual teacher level. Following each termly monitoring meeting with the Director of Subject, a member of the senior team will write a formal report. Evidence will be gathered through a number of ways including:

D2 – measuring pupil performance effectively and setting challenging targets
• classroom observations • class visits • analysis of relevant data • student work scrutiny • student surveys The report will include an action plan that will be followed up in line management meetings. Regular contributors from the University will be formally evaluated on their first visit by the school leadership team and will then be included in learning walks and lesson observations. Any concerns will be raised with their University managers who will address these swiftly. Findings will be shared with governors. The strong governance team will hold leaders to account for the achievement, behaviour and safety of all students in the school, including the most able and disadvantaged students and those for whom the Pupil Premium provides additional support. This system will be modelled on the approach currently used at Chesterton. Link governors, some of whom will be academics from the University of Cambridge, will act as critical friends to Directors of Subject.

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels

If you are applying for more than one school, please provide one version of this section, referring to individual schools or circumstances where relevant.

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D3 – a staffing structure that will deliver the planned curriculum within the expected income levels
Cambridgeshire Educational Trust is committed to staffing classes with high quality, specialist practitioners. Our educational provision is inspiring because of the experienced, enthusiastic staff that we employ. Staff stay with us because they enjoy working within the trust ethos and we are focused on ensuring we recruit well. Both of these elements will be of great importance to our new school. Our experienced staff understand their subjects and know how to engage students so that our learners really feel like mathematicians, scientists and economists. They are able to do this because they create excellent schemes of learning and because they truly understand the assessment demands of their subjects and the latest pedagogy. This wealth of experience will be used to establish outstanding faculties from day one in the Cambridge Mathematics School. After a skills gap analysis in the pre-opening phase any skills gaps will be filled by • high quality CPD (e.g.Isaac Physics, Cambridge Mathematics, FSMP) • additional recruitment • secondment This will ensure that the quality of teaching and learning is of an exceptionally high standard for our new students. We are good at spotting talent and that is one of our most successful strategies for recruitment. A significant number of our teachers have worked through our graduate programme, joining us as progress support workers who support students who are in danger of falling behind and going on to train and teach with us. This is a model that we would use to support recruitment in future years at the Cambridge Mathematics School. Our professional development programme has a strong focus on leadership and we have a highly experienced senior team already working within the trust. We also have a very strong pastoral team, middle leadership team and a range of responsibility holders. Whenever we have an internal leadership vacancy it is hotly contested as we

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels

have significant experience developing within our staff because of the trust's outstanding professional development programme, opportunities for distributed leadership and excellent role-models. We feel that we are effectively growing our next tier of leaders within our trust and we will be able to utilise the strength of our existing leadership and this new tier to ensure that our free school thrives.

Our trust is one of the few in Cambridgeshire that has been able to fill all vacancies with well-qualified subject specialists. As we move into even more challenging times our established networks with Canadian schools, our pro-active marketing of vacancies and our own internal talent-spotting will enable us to ensure high quality staff for our free school.

In the early phases of opening the Cambridge Mathematics School we will have the ability to provide cost-effective staffing alongside a broad curriculum offer. This will see experienced Chesterton staff working in the new school for blocks of time, alongside a permanent Head of School. Our curriculum and staffing will then evolve through the phases of opening. Through shared staffing across the trust, students will have access to a specialist curriculum within a structure that can provide a wide range of enrichment opportunities. Even though they are attending a specialist mathematics college, students will be able to take advantage of enrichment activities including arts-based provision, for example by studying Latin, Mandarin, and sociology, or working alongside Chesterton's artist in residence. They can do this by joining the before and after school classes at Chesterton CC, a model already successfully trialed with the Astronomy class offered at Chesterton which attracted both adults and school students alike.

Staffing in the opening 4 years

The tables below outline the structure of staffing in the years from opening to full capacity. The model is predicated on Year 12 being at full capacity in year 3. The school will benefit from a shared staffing model with Chesterton Community College. This will allow for flexible staffing and the successful recruitment strategies employed at Chesterton will also benefit the Cambridge Mathematics School. This will ensure

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels

timetable planning that meets the students' needs and allows them to study any combination of the subjects offered.

	YEAR 1	Year 2	Year 3	Year 4
Headteacher	100%	100%	100%	100%
Assistant Headteacher	100%	100%	100%	100%
Director of subject/Subject leader/teaching staff	186%	375%	511%	713%
Graduate Assistant	25%	177%	232%	268%
Receptionist / Administrative support	100%	100%	100%	100%
Science Technician	10%	30%	50%	80%
Security/Maintenance	50%	50%	50%	50%
Teaching assistants, EAL support, SEN specialist support, site Manager, Cleaners, Canteen staff, Finance staff, Human Relations Officer, Administrative start up support, CEO of trust	Trust Top slice			

The Headteacher will be responsible for the curriculum and strategic direction of the school and will hold all members of staff to account. They will be supported by the Assistant Headteacher who will have the specific responsibilities of ensuring that the pastoral system, including careers support, enrichment activities and sports is of an outstanding standard as well as overseeing the EPQ. They will be supported by the CEO of the Trust who will both challenge and support the work of the school

University of Cambridge and St John's College contributions to staffing

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels

We have worked closely with the following academics to develop our free school bid:

[redacted]

These colleagues will continue to provide support for the Cambridge Mathematics School, both in the pre-opening phase and when the school opens to students. This support will include:

- financial support to enable CMS to provide outreach work;
- offering CPD to CMS teachers;
- collaboration on teacher training programmes;
- part time secondments and shared staffing to CMS staff to work on prestigious curriculum development projects;
- admissions advice and support;
- access to the wide range of support available in the local and wider area.

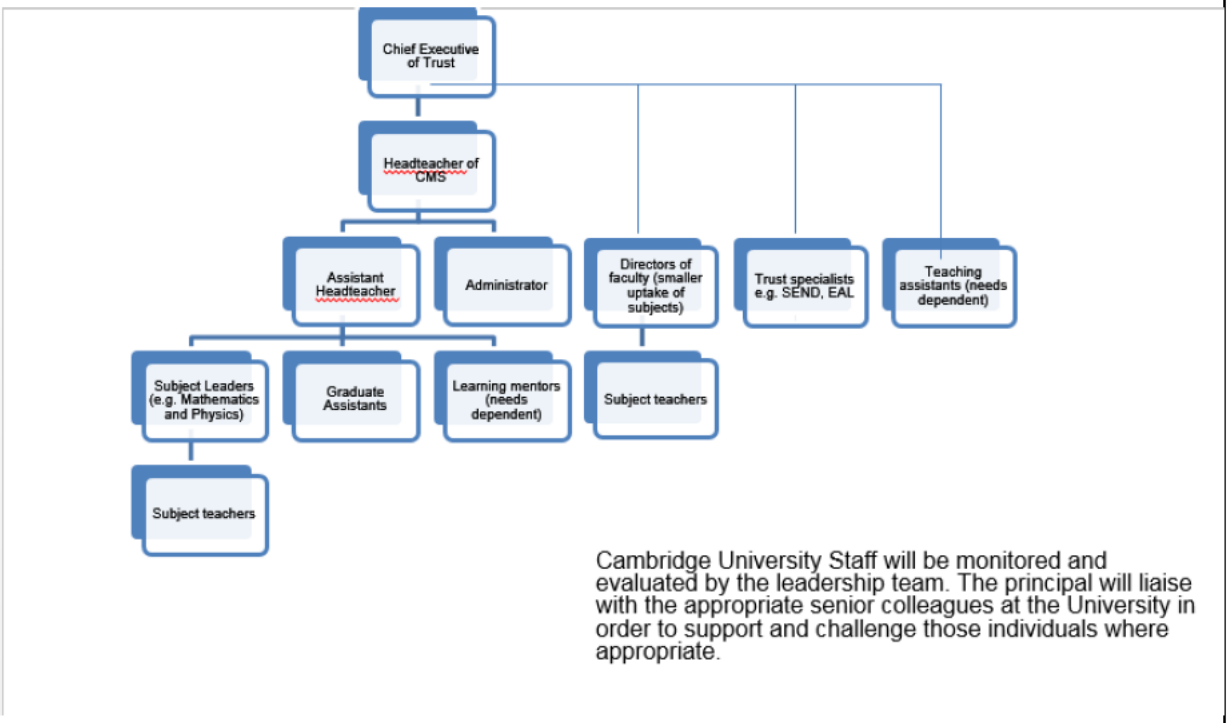
In addition, St John's College Cambridge, will

- provide additional entrance test (e.g. STEP) tutoring via either STEP weekends or timetabled into weekly slots; these will be held at the college in order to encourage students to see it as a familiar environment;
- provide admissions and careers advice and support;
- train college students to be pastoral and academic mentors to inspire and encourage sixth form students to apply to prestigious universities;
- provide CPD regarding admissions to school staff;
- offer enrichment activities including workshops and tours of university facilities;
- offer a platform for international collaboration by facilitating links between high performing STEM institutions such as the US Consortium of STEM schools;

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels

We expect to provide a model of excellent practice that other institutions can adopt in order to improve their provision in their STEM subjects.

Staffing Structure at full capacity.



Cambridge University Staff will be monitored and evaluated by the leadership team. The principal will liaise with the appropriate senior colleagues at the University in order to support and challenge those individuals where appropriate.

Below is a discussion about how we would adapt our model in the event of recruiting only 70% of our anticipated cohort.

- Sharing of staff will be made possible by scheduling the Mathematics School as part of the CCC timetable, 'as if it were on site', allowing specialist staff to be based in both schools. This will be planned to allow for travel time between institutions and also ensure that there is always specialist provision. We would be seeking to have as many permanent subject specialists on site with Heads of Subject as the school becomes full.

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels

- Across both schools we would continue with a number of shared roles as we feel this would provide cost-effective provision; allow for highly specialist provision and serve as recruitment and retention incentives as it would provide progression within the trust. This would include; the Director of Faculty role in the case where an option subject only has a small take up. This would ensure the high quality delivery of subject provision across the trust in; the SEN specialist teacher role which supports with conditions such as dyslexia; our EAL specialist teacher who can support the provision for EAL students and our graduate support assistant roles (interns) where appropriate.

- The extremely flexible staffing model described above, with senior positions (Director of Faculty roles) having the ability to span both schools and teachers and many other staff being shared between the schools too, gives a school that is well placed to operate at the full capacity anticipated or at a reduced capacity (e.g. 70%) if that is what the demand for places proves to be. The model would enable the number of staff (and therefore cost) to vary in almost direct proportion to the number of students (and thus income).

- Chesterton's experience of operating a successful secondary school would be easily transferable to the sixth form and gives confidence to this model and approach. Its proven track record in utilising a number of part time staff who are willing and able to vary their commitments according to the school's requirements, makes the flexible staffing model particularly effective. Chesterton staff are extremely talented at enabling all students, including the most gifted, to achieve exceptionable outcomes. This can be evidenced in GCSE outcomes For example in 2016, 40% of our students achieved a grade A or A in Maths and we had record science results with 70% gaining each of Biology, Physics and Chemistry at grade A or A in each of the separate sciences

D3 – a staffing structure that will deliver the planned curriculum within the expected income levels
• In addition, the Trust would ensure that the new school is built to be very efficient (i.e. with regard to energy usage) and therefore cost effective, with particular emphasis on ensuring that the school is appropriately "zoned". This would enable the facilities to be used most effectively when not needing to be fully utilised, both in the early years and in the case of it being under capacity at any time. • Many of the typical overhead costs of support function borne by most schools (e.g. Finance, IT, Data team, catering management etc.) will be provided by experienced staff at Chesterton and will be a part of the variable top-slice charge (linked to income) made by the Trust. Training (CPD) will also operate across the Trust. • As a result of the above factors, the fixed costs of the new school would be pretty negligible. Depending on the timing of any under capacity these remaining fixed costs would be actively managed i.e. revising the timing of planned changes during the development of the school (e.g. the size and composition of the SLT, the introduction of Heads of Subject based permanently at the school and the level of TLRs awarded, and the timing and balance of other staff being dedicated to Godmanchester or shared across the Trust). As a result of all of the above, the specialist sixth form would remain entirely viable, and still able to effectively deliver its full curriculum, even if student numbers prove to be significantly lower (i.e. 70%) than those anticipated.

D4 – the school will be welcoming to pupils of all faiths/world views and none

All applicants will need to complete this section in full for each school they wish to open. Please:

- use the space provided below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

D4 – the school will be welcoming to pupils of all faiths/world views and none
Cambridge Mathematics School will be non-denominational. We recognise that we will be welcoming students of many faiths and cultures given the diverse demographic within Cambridgeshire and, given our current experience within our trust, we would welcome the enrichment this diversity can offer to the lives of all students. The trust has had significant success engaging with a multi-cultural parent and student body (over 40 languages are spoken across the trust). We ensure that we have exceptional provision in terms of communication and this would extend to the Mathematics School. In terms of attracting students from different backgrounds and communities, this is one of the driving forces behind our provision: we wish to extend access to sixth-form studies and thereafter to either Oxbridge or Russell group/Sutton 30 universities. As part of our initial opening phase we will be meeting with representatives from our local communities, including faith-based community groups, to share the vision for the school with them. This will ensure that there is a developed understanding across all communities about how this school can benefit a wide range of students. Building a community involves learning to respect others and to live alongside people holding different opinions. Our pastoral system will ensure that students of different faiths, or none, have the opportunity to work together on a daily basis. Staff and students will have plenty of opportunity to get to know each other personally: this helps to remedy the tendency to pre-judge the 'other' based on religion, race or ethnicity. Every student will encounter the same high quality learning experiences both within the classroom and through a rich and varied extra-curricular programme. Every student will be set personalised targets; these will be set regardless of their faith or non-faith background. We will respect the right of people from different world faiths to choose whether or not they wear religious items associated with their faith. The food provided will meet the fullest range of dietary requirements. We will provide

D4 – the school will be welcoming to pupils of all faiths/world views and none

halal food for Muslim students and will also cater for other cultural or faith requirements.

An interfaith reflection room will be provided for students and staff. We will work to build good relationships with the leaders of the main faiths in the local area including working with them to provide pastoral support where this is needed.

The school calendar will include celebration of events from around the world, globally, nationally and locally. This will help us to develop a very strong sense of community, culture and heritage. We will recognise different religious events such as Easter, Christmas, Ramadan, Eid, Diwali and Purim and will also mark important British secular celebrations such as St George's Day, Mothers' Day and Fathers' Day, May Day and International Women's Day. We will look for opportunities to celebrate the diversity of the school population through the academic and pastoral curriculum to enable students to learn about cultures, customs, beliefs and ideas that are different to their own. This is one of the most effective mechanisms for combatting prejudice in society as a whole.

As a trust we have clear policies linked to PSHE, Prevent and safeguarding and welfare; these would be extended to the Cambridge Mathematics School. The PSHE programme will focus on developing students understanding of the adult world so that they can make informed choices as they move into the freedoms afforded by adult life. It will be delivered in part by the teachers at the school, in part by specialist PSHE teachers from the Trust and in part by specialists who are invited in to provide expert guidance to students such as Cambridge University staff and local business partners. Cambridgeshire Educational Trust has a robust governance structure which has a clear review procedure for all policies. Relevant committees are allocated policies, with a fixed time-scale for review. Input is provided from relevant stakeholders at committee meetings which feeds in to the review process.

Section E – evidence of need

This section asks you to evidence that there is a need for the school(s) you are proposing. **All** applicants will need to complete both sections in full for each school they wish to open.

E1 – provide valid evidence that there is a need for this school in the areas

This section will need to be completed by **all** applicants. Please:

- use the space provided below;
- include evidence as annexes; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

E1 – provide valid evidence that there is a need for this school in the area

Meeting basic need: population growth

Analytics* Cambridge data shows a projected increase of 61% of students aged 11-15 in Cambridge City over the period 2015-2030. This equates to a 3.4% annual rise. This increase is not evenly spread across the city – as shown in the table below.

*see Analytics projections

Location	Projected increase 2015-2030	Equivalent annual increase 2015-2030
Cambridge City	61%	3.2%
Cambridge City North	85%	4.2%
Cambridge City South	46%	2.6%

E1 – provide valid evidence that there is a need for this school in the area

In addition, the Office for National Statistics suggests that, without taking proposed housing developments into account, the Cambridgeshire districts will also grow:

District	Projected growth to 2019
South Cambridgeshire	+5.4%
East Cambridgeshire	+4.6%
Fenland	+3.7%
Huntingdonshire	+3.4%

Additionally, counties within a 25 mile radius of the preferred site for Cambridge Mathematics School (CB4 3NY) are expected to grow as follows:

County	Projected growth to 2019
Hertfordshire	+4.3%
Essex	+3.3%
Suffolk	+1.8%
Central Bedfordshire	+6.0%
Bedford	+5.3%
Norfolk	+3.0%

Despite this high level of projected growth, no additional provision has yet been allocated to sixth form places in the city.

The Cambridge Mathematics School's proposed opening date is 2019. By 2019 we can see a forecast of an additional 113* sixth form age students in the north of the city, even when discounting growth in surrounding areas. There is an additional 96* in the Ssuth of the city. A new 11-16 secondary school (Trumpington Community College) has already opened in the south of the city with 150 students in each year group. It

E1 – provide valid evidence that there is a need for this school in the area

currently caters for years 7 and 8 only: this alone would provide a student population almost large enough to populate the proposed sixth form.

*assuming linear growth from Cambridge Analytics forecasts

Predictions of student numbers between 2015 and 2030 indicate that there will be an additional 1300-1500 sixth form age students in Cambridge City, taking into account proposed housing developments within the city boundary. This takes no account of additional students in either the inner necklace of villages around the city or the surrounding areas, all of which have significant housing developments allocated in the local authority plans.

Local sources make clear there are already problems with oversubscription to mathematics and science courses in Cambridge. These pressures will increase as demand grows within the city. The growth in the very large catchment areas the sixth form providers serve will also fuel such demand.

Providers within a 3-mile radius of the proposed Cambridge Mathematics School

	OFSTED rating	Location	Catchment	Core offer	PAN	Published minimum number of external candidates
Parkside Sixth Form	Good	Central Cambridge	Parkside Federation students plus minimal external candidates	IB	100-120	40
Cambridge Regional College	Good	North Cambridge		Vocational	Approx. 350 level 3 learners	n/a
Impington Village College	Good	North Cambridge	IVC students plus minimal external candidates	IB	'Within a range appropriate to the school'	50

E1 – provide valid evidence that there is a need for this school in the area

Hills Road Sixth Form College	Outstanding	South Cambridge	Cambridge Area Partnership	A levels	Admits approx. 1200	
Long Road Sixth Form College	Good	South Cambridge	CAP	A levels/Vocational	Admits approx. 1000	
University Technical College	No OFSTED report published. Early indications of exam results suggest poor performance. (quote from local newspaper for 2016 *The college recorded a 47 per cent A*-C pass rate, with 97 per cent of grades A*-E.*	South Cambridge	'Whole of Cambridgeshire and the area within a 25 mile straight line radius of the main learner entrance to the UTC'	A levels	210	

Provision of A level courses within Cambridge City

63% of post-16 places in Cambridge in 2015 were for IB and A Level courses. It is reasonable to assume then that, *as an absolute minimum*, by 2019 Cambridge will require an additional 63% of 208 A level and IB places, which equals **131** additional places.

IB and A level providers in the north of Cambridge City

Parkside and Impington Village College only offer minimal places to students joining the sixth form from other secondary schools (approx. 100 students). They do not have the capacity to meet the projected need for in excess of 131 A level/IB places by 2019. Also, significantly, they both have the IB as their core offer rather than A levels (IVC

E1 – provide valid evidence that there is a need for this school in the area

offer some A levels in the arts subjects but none in STEM subjects; Parkside do not offer A levels).

IB and A level providers in the south of Cambridge City

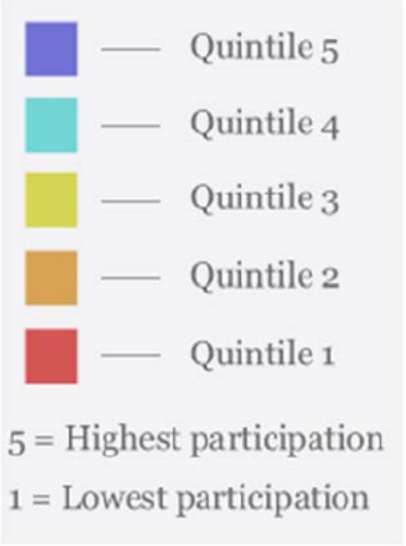
Hills Road Sixth Form College, Long Road Sixth Form College and the University Technical College all have very large catchment areas. The UTC's website states that 'places are not limited to those living in Cambridgeshire, the main catchment area is considered to be the area within a 25 mile straight line radius of UTC, Cambridge'. Hills Road Sixth Form College and Long Road Sixth Form College have very similar catchment areas to UTC.

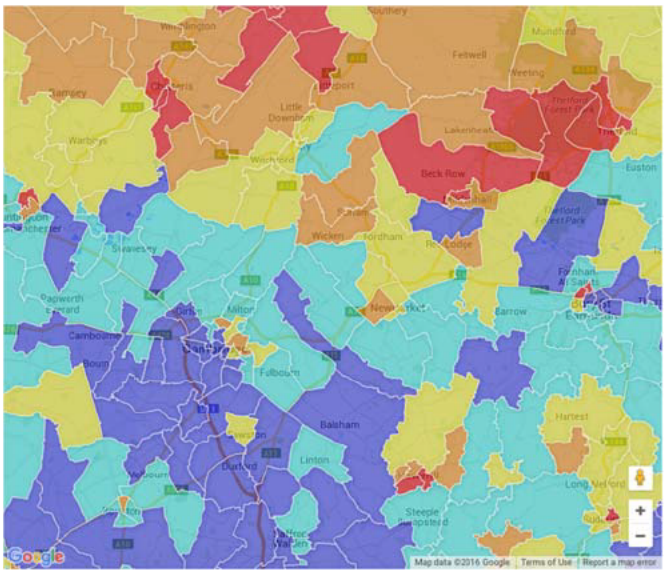
Hills Road and Long Road Sixth Form colleges are very successful and popular and have been full year on year for many years. UTC is relatively new, but it serves a wide catchment (see above) and, on its own, cannot meet even the basic need for places as evidenced by the Office of National Statistics figures. Even without housing development, the population in and around Cambridge is growing significantly year on year. When the demographic figures for Cambridge City (including growth due to housing developments) are taken into account, it is clear there is a crisis looming with regard to providing sixth form places.

Providing choice and diversity to young people

North Cambridge is in the 3rd quintile nationally for proportions of students accessing higher education, and the villages to the north of the city have proportionally fewer residents entering higher education than those to the south (see map below).

E1 – provide valid evidence that there is a need for this school in the area





The intended catchment area covers a 15-mile radius of the school. However the expected intake of students will mirror the north of Cambridge City as shown below.

E1 – provide valid evidence that there is a need for this school in the area

Schools nearest to the proposed free school location (11-16 schools in a 3 mile radius)	% of pupils eligible for Pupil Premium	% of pupils who speak English as an Additional Language	% of pupils with an EHC Plan
Chesterton Community College	19%	19.1%	2.2%
North Cambridge Academy	49.9%	24.1%	2.2%
Parkside Community College	15.7%	19.9%	1.9%
Impington Village College	16.8%	18.9%	6.1%
Coleridge Community College	32.6%	22.1%	2.5%
Local Authority Average	18.8%	10.5%	7.7%
National Average	27.4%	14.4%	7.2%

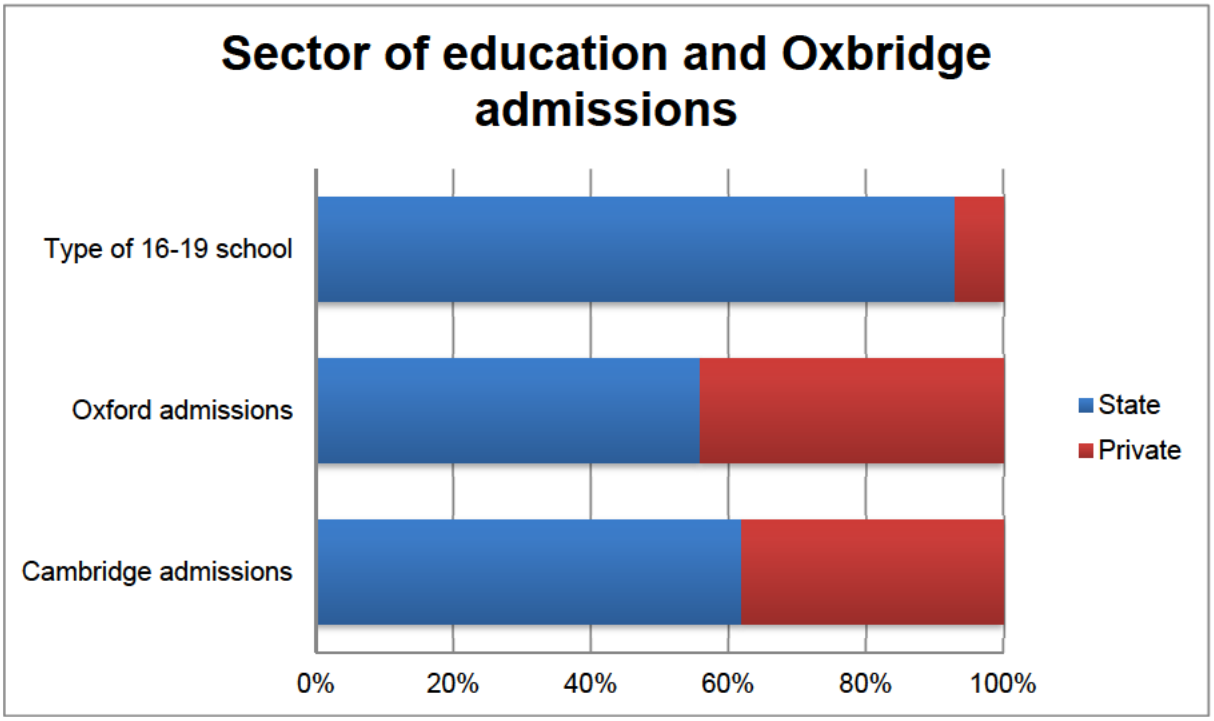
The Cambridge Mathematics School will offer a unique environment. There are no providers in the north of the city currently offering A level subjects; the school will fill a much needed gap. The brightest young people will be able to come to study mathematics and other related disciplines in an environment where they can thrive; the setting will be designed so that everyone knows everyone else and there will be a strong focus on pastoral care. The sixth form will offer 100 places a year, in stark contrast to the large sixth form colleges which are currently the most able students' only real choice for A level subjects. The successful local sixth form colleges admit upwards of 1000 students each year.

Raising the bar – ensuring more young people from state school backgrounds apply to the most prestigious universities.

E1 – provide valid evidence that there is a need for this school in the area

In 2014, the proportion of successful Cambridge applicants from the UK who had been educated in the state sector was 62.2%; 37.8% came from independent schools. At Oxford, 56.3% of those accepted were from state schools, up from 47% in 1997, when access and outreach activities started to become more prevalent.

However, as just 7% of young people in the UK attend an independent school, and 14% of sixth formers are at independent schools, there is still a significant disparity between state and independent sectors in their success at gaining a place at Oxbridge.



Large discrepancies between Oxbridge colleges in the number of offers made to applicants from the state sector illustrate that many should be doing much more. Some colleges make less than half of their offers to state-educated pupils. The Cambridge Mathematics School will work very closely with St John's College, Cambridge, to provide a model of good practice that other institutions can adopt in order to further improve state school admission totals.

E1 – provide valid evidence that there is a need for this school in the area
Local issues The Greater Cambridge City Deal identifies cross-city commuting as a significant problem in Cambridge. Currently an average of 206,000 vehicles travel across the city boundary each day. This causes major congestion at peak times, coinciding with the 'school run'. This is costly in terms of the environmental pollution that it generates and because of the economic losses that arise as a result of employees spending working hours in traffic jams. A number of transport developments are planned for the north of Cambridge City in an attempt to reduce cross-city commuting. These include Cambridge North Station in Chesterton and additions to the guided busway network that will link the new station to residential areas, the Science Park and the Business Park. A sixth form college located in the north of the city would help to increase the city's sustainability. It would be easily accessible by guided busway or by rail, thus reducing the need for students from villages to the north of the city to commute across Cambridge. It would also have the potential to reduce the number of journeys made by students resident in the north of the city.
Please tick to confirm that you have provided evidence as annexes: ☐

E2 – successful engagement with parents and the local community

This section will need to be completed by **all** applicants. Please:

- use the space provided below;
- include evidence as annexes; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

E2 – successful engagement with parents and the local community

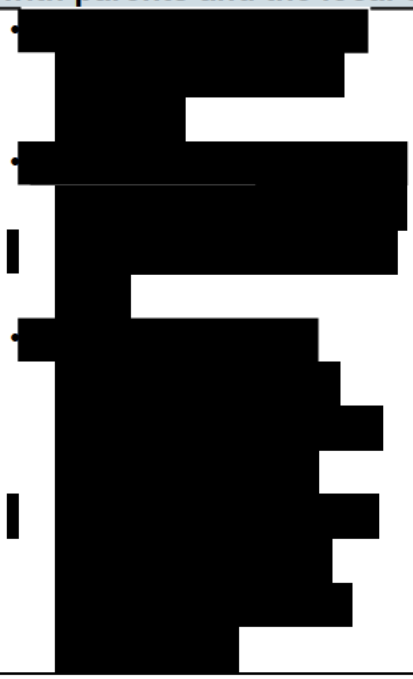
The trust believes strongly in working closely with parents and the local community. It has a great deal of experience that can provide support and model approaches. The trust engages effectively with parents and carers to help them understand how their children are doing in relation to the standards expected and what they need to do to improve. We know this is successful because of the responses we receive from parental surveys as well as attendance at parent forums, parent information events and the strong PTA that supports the school. In our most recent parent survey, 93% of parents stated that they would highly recommend the trust to other parents, showing how successfully we engage with our community.

The trust is proud to be at the heart of its community: we see ourselves as a hub not just for our students and their parents, but also for the adult learners who come and study with us, like those who are learning GCSE Astronomy alongside our students, for the toddlers who come to learn to swim in our sports' centre and for those members who have suffered heart attacks and are using our well-trained sports' staff to help shape their recuperation programme and for the senior citizens who join us every half-term to come and eat lunch in our dining hall with all of our students. Everyone mentioned is a member of our community; we don't just engage with them, we see them as our trust community. This would be our approach at the Cambridge Mathematics School pre and post build: to consider how everyone in the wider community will use the new school by seeking their ideas and ensuring they are involved in shaping the reality of the new school.

Clearly the Cambridge Mathematics School will be unique. It will offer choice and diversity to local provision but this offer will be unfamiliar to both parents and the community. This makes it even more important to ensure that our community engagement is carefully considered and planned.

In order to engage the community we have developed the strategy outlined below:

Group	Notes	Timescale
Engage academic community		
Engage academic community	Links well established including	May to July 2016 and ongoing.

E2 – successful engagement with parents and the local community		
Establish working partnerships with key academics from Cambridge University		Monthly newsletter keeps group well informed. Members of group continue to feedback key ideas and information.
Share vision with wider community		
Share initial vision using the trust website	Website to have dedicated page with vision set out in detail along with initial curriculum information. Include forms for parents/students to complete to indicate interest and help form pilot survey.	Academic year 2016-2017
Targeted parental/student engagement stage 1	Market vision to members of the trust as an initial community – this will work as a pilot survey in order to refine the model further before testing on a wider group.	Academic year 2016-2017
Gather support from local 11-16 providers	Share vision with local headteachers and ask for letters of support	Academic year 2016-2017
Recruitment strategies		
Targeted parental/student engagement stage 2	Leaflet campaign via local press as well as social media.	Academic year 2016-2017

E2 – successful engagement with parents and the local community		
Information Events • Trust parent information evenings • CAP sixth form fairs	Presentations with regard to vision. Further information about proposals and opportunities for key stakeholders to form final details to create prospectus.	Academic year 2016-2017and onwards until opening

Section F – capacity and capability

Please note:

If you are not an approved academy sponsor, but are interested in finding out more about this role and potentially apply to become a sponsor, please make contact with the department's Sponsor Approval team**.**

It is important to make clear that approval as an academy sponsor will not guarantee a free school application is approved. Each free school application is considered against the criteria set out in this guidance. Similarly, approval to deliver a free school project does not mean that you would be automatically chosen to deliver a specific academy project. All projects are carefully considered on a case-by-case basis. It is the role of the department to consider which of our sponsors will provide the best possible solution for a particular school(s), and ministers will make a final decision as to whether the proposed sponsor should take forward a specific project, based on that advice.

F1 (a) Skills and experience of your team

All applicants will need to complete this section, but you will give us different information depending on which type of group you are. Please refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

If you are a sponsor with at least one school, or a MAT with at least two schools, and you have a letter or email from your RSC office saying how many free schools you have capacity to open, you need to:

- Tell us **who (a named individual) is in charge** during pre-opening and provide their CV.

If you do not meet the criteria set out above, please:

- complete the table below; and
- provide a short commentary on your plans to manage the pre-opening project.

You must complete a separate line for each member. Please identify individuals who will be company members, trustees, the chair of trustees, members of the pre-opening team and if applicable, the local governing body, including the chair if they have been identified.

Name	Where they live (town/city)	Member of core group	Role(s) (pre-opening team, member, trustee, principal designate, local governor once school is open)	Summary of relevant expertise Please refer to the relevant section of the assessment criteria booklet to check what detail you need to give	Available Time (hours per week)
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[Add lines as appropriate]

F1 (a) Skills and experience of your team

The Chief Executive Officer of The Cambridgeshire Educational Trust is [redacted] (CV attached as an annex). We will recruit the Principal Designate from within the trust's existing senior leadership team. We expect that this appointment will be made within three months of the school being approved. The principal designate will be expected to have completed, or be completing the NPQH programme. The appointee will have opportunities to work in a seconded way, prior to opening, at a leadership level in a sixth-form institution; shadowing a current sixth-form principal. Throughout their first two years in post they will be mentored by the CEO of the Cambridgeshire Educational Trust and also by the recently retired Principal of a post-16 institution [redacted])who has been supporting our bid development.

Pre-opening stage

The project lead on the pre-opening stage will be the Principal Designate. The post is being recruited from within the existing senior leadership group of the trust. Time will be created by appointing additional staff to cover some of the responsibilities currently held by the Principal Designate. This will have the benefit of building additional leadership capacity within the trust.

Members of the core applicant group will be responsible for the following activities during the pre-opening stage:

Key activity	Core applicant(s) responsible	Timeline
Oversight	[redacted]	Throughout pre-opening period
Recruitment	Principal Designate Personnel to be recruited: • Classroom teachers • Subject specialists i/c KS5 • Graduate Assistant • Receptionist	 January-July 2019 January-July 2018 January-July 2019

F1 (a) Skills and experience of your team

F1 (b) Skills gap analysis

This section will need to be completed by **all** applicants. Please set out any skills gaps that you think exist within your group and how you intend to fill them. Please:

- complete the table below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

We have completed our skills gap audited and already filled any gaps, see table F1.

Skills/experience missing	**Where is the gap?** i.e. pre-opening team, trustees, local governing body	**How and when do you plan to fill the gap**
Project management of build (member of senior team – in terms of time etc)	Pre-opening	Project manager to be appointed
Project management of build (member of senior team – in terms of time etc)	Pre-opening	Project manager to be appointed

Skills/experience missing	Where is the gap? i.e. pre-opening team, trustees, local governing body	How and when do you plan to fill the gap

[Add more lines as appropriate]

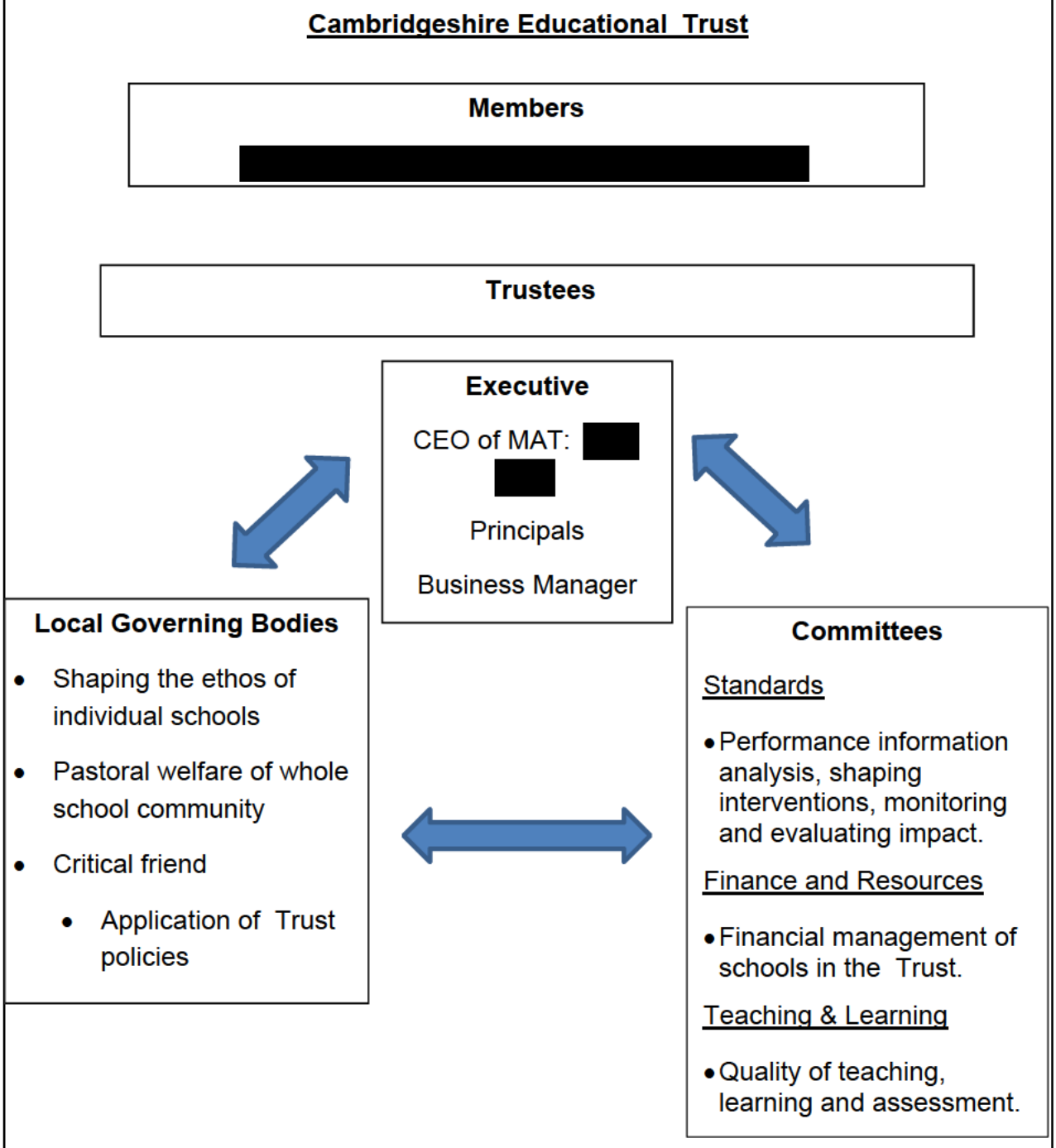
F2 – a governance structure, and roles and responsibilities that will ensure accountability and effective decision making in this academy trust and drive improvement in the new free school

All applicants will need to complete this section in full for each school they wish to open. Please:

- use the space provided below; and
- refer to *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

F2 – a governance structure, and roles and responsibilities that will ensure accountability and effective decision making in this academy trust and drive improvement in the new free school
Please see the attached letter from Tim Coulson, Regional Schools Commissioner for the East of England and north east London, confirming The Cambridgeshire Educational Trust's capacity to open additional schools within the trust. The information below demonstrates the governance structure of the trust.

F2 – a governance structure, and roles and responsibilities that will ensure accountability and effective decision making in this academy trust and drive improvement in the new free school



Roles and Responsibilities

Members

Up to 4 members (3 currently in post) will meet annually to evaluate and review the position of the Trust, acting as a critical friend. Members are responsible for

F2 – a governance structure, and roles and responsibilities that will ensure accountability and effective decision making in this academy trust and drive improvement in the new free school

fundamental decisions such as changing the constitution and the make-up of the board of Trustees.

Trustees

Up to 10 trustees (7 currently in post) together with the CEO are responsible for setting general policy, adopting annual plans and budgets, monitoring the academies by the use of budgets and making major decisions about the direction of the academies, capital expenditure and senior staff appointments. Each academy has representation on the board of trustees, most likely the chair of the local governing body. Such representation will ensure the board of trustees has experts in the necessary fields.

Local Governing Bodies

Members of the individual academy governing bodies develop and implement annual plans together with the individual academy leadership teams. They are responsible for ensuring the application of trust policies and upholding standards. Local governing bodies act as the experts on individual academies and as such contribute to the shaping of the ethos as well as monitoring the welfare of the whole school community. Parents, teaching staff and support staff are represented on each of the local governing bodies.

Committees

Three committees sit across the academy trust with oversight for Standards, Finance & Resources and Teaching & Learning. The aim of the committees is to ensure consistency and sharing of good practice across the trust. The committees are made up of representatives from each local governing body.

Leadership Teams

F2 – a governance structure, and roles and responsibilities that will ensure accountability and effective decision making in this academy trust and drive improvement in the new free school

The leadership teams implement the policies laid down by the trustees and governors and report back to them. Each leadership team is responsible for the authorisation of spending within agreed budgets and the appointment of staff. Each team is also responsible for the day to day operation of the individual academy in particular organising the teaching staff, facilities and students.

Appointment to Governance Team

Position	Method of Appointment
Member	Appointed by other Members
Trustee	Appointed by Members/Chair of LGB automatically a Trustee
Chair of Committee	Appointed by committee members
Chair of Local Governing Body	Appointed by Local Governors
Parent Governor (LGB)	Elected by parent body
Staff (Support/Teaching) Governor (LGB)	Elected by staff body
Community Governor (LGB)	Appointed by Chair of Governors

MAT Growth

The MAT is future proofed to allow for growth as and when the trust governance team feels appropriate. The vision of the MAT is not growth for growth's sake but to consider areas of need as they arise and evaluate the extent to which Cambridgeshire Educational Trust could have a positive impact on the lives of the community involved. Currently CET has a vision for two outstanding secondary schools (Chesterton and Godmanchester – free school application made for latter) along with a bespoke specialist Maths & Science Post 16 centre. We have a very strong relationship with our

F2 – a governance structure, and roles and responsibilities that will ensure accountability and effective decision making in this academy trust and drive improvement in the new free school
feeder primary schools and it is possible that one of those may wish to join CET in the future. As our success grows so does interest in our MAT at all levels and this is allowing us to succession plan and build capacity in our governance, leadership and teaching teams so that we have high quality people waiting in the wings to step up to positions of responsibility. **Strategy for Managing Conflicts of Interest** Cambridgeshire Educational Trust expects individual trustees/governors and governing bodies to be able to identify any conflicts of interest at an early stage. Trustees/Governors are expected to declare any conflict of interest as set out in the Conflict of Interest policy. Trustees/governors will have a standard agenda item at the beginning of each meeting of the governing body to declare any actual or potential conflicts of interest. If a trustee/governor is aware of an undeclared conflict of interest affecting another trustee/governor, then he / she will notify the other trustees/governors or the Chair. The Trust Board will carry out continuous monitoring of its activities and members to ensure that any conflicts of interest are identified and mitigated as soon as possible. Members may decide to terminate the membership of the relevant trustee / governor from the governing body, if he / she is found to have knowingly and deliberately failed to declare an interest and has brought the school into disrepute. **Current Trust Conflicts of Interest** (addressed in line with the strategy above) Member Business Interest: Microsoft Product/Supplies/Services: Software and hardware Position held: Researcher

F3 – independent schools have a good educational track record and credible plans for meeting the standards of the state sector

This section is for independent converters to the state sector only. Please:

- use the space provided below ; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

F3 – independent schools have a good educational track record and credible plans for meeting the standards of the state sector
[Add text here. Table expands]

F4 – Independent schools have a good financial track record and credible plans for meeting the standards of the state sector

This section is for independent converters to the state sector only. Please:

- use the space provided below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

F4 – Independent schools have a good financial track record and credible plans for meeting the standards of the state sector
[Add text here. Table expands]

F5 – Independent schools have an appropriate, well-maintained, and secure site

This section is for independent converters to the state sector only. Please:

- use the space provided below; and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

F5 – Independent schools have an appropriate, well-maintained, and secure site
[Add text here. Table expands]

Section G – budget planning and affordability

All applicants will need to complete this section, but you will give us different information depending on which type of group you are.

Please:

- complete the Excel spreadsheet (where necessary);
- add any commentary you want to include in the space provided below, for example, explaining the costs of centrally provided services (we do **not** want you to provide a commentary on the whole budget, please only include particular areas you want to highlight); and
- refer to the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

G1 – budget planning and affordability
Please refer to the Excel spreadsheet included in the bid. This has been prepared to reflect the staffing structures etc outlined/detailed in section D. The Mathematics School is being run by the Cambridgeshire Educational Trust and would utilise the experience and expertise of Chesterton Community College staff. The trust has proven the ability to successfully operate within a challenging funding situation by successfully running their founding school in Cambridgeshire's historically low funding environment.

Section H – premises (use Excel spread sheet)

This section will need to be completed by **all** applicants. Please:

- complete the Section H tab in the Excel spread sheet; and
- refer to the relevant section of the *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

Annexes

This section will need to be completed by **all** applicants. Please:

- Provide CVs of key individuals as set out in the criteria booklet and any letters of support and maps.
- Any annexes are excluded from the page limit, but should be submitted as part of your application, i.e. as one Word document.
- Refer to the relevant section of *how to apply to set up a free school guidance and the criteria for assessment* for what should be included in this section.

Self-assessment form for independent schools

Name of school						
Girls/Boys/ Co-educational		**% Special Educational Needs**	**% Free School Meals (or pupils on bursaries)**	**% English as an Additional Language**	**% Persistent Absence**	**% Attendance**
Name of principal		**Additional information about the school**				
Chair of governors		[Please provide details about your school's site, physical environment and any finance issues, including any debt you may have.]				
Number of pupils currently on roll						
Capacity						

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Your assessment against Ofsted framework (please provide a commentary) Review outcomes - current position		Your self-assessed Ofsted grade (1-4)	Required position - risks, actions plan (including priorities identified) and timescales
Overall Position	[Please provide an overall commentary on your school, with reference to the Ofsted grade descriptors, please delete this guidance before submitting this form]		
Achievement of pupils at your school	[This area is key in terms of present and future projections and actions to be undertaken. It is focused on pupil progress from clear baselines and should be related to national grouped data. The quality of pupils work across subjects, their skills in reading, writing, communications and mathematical skills across the curriculum Closing the gap for all pupil groups and ensuring that SEND pupils achieve Data and data tracking systems including intervention strategies to ensure pupil progress should be reviewed. The use of comparator measures and of validation/ moderation will be essential to ensure reliability. please delete this guidance before submitting this form]		

Quality of teaching in your school	[In this area, one might expect to see a clear understanding of teaching quality across the school and accountabilities to ensure the dissemination of outstanding practice and delivery of performance management. Staffing structure and accountabilities in relation to the curriculum and any new curriculum changes that might be developed due to the changing nature of the intake. Consistency of student presentation of work and scrutiny reference progress and standards How marking, assessment and students feedback/reflection enhances pupil learning Teaching strategies including setting of appropriate homework, together with a review of support and intervention strategies to match pupil needs How teaching promotes pupils learning and progression The review should be validated externally to ensure moderated outcomes for the school Reading, writing, communication and mathematics across the curriculum. Tutor and pastoral time including SMSC and British values please delete this guidance before submitting this form]		

Behaviour and safety of pupils	[Please refer to the Ofsted handbook and supplementary handbooks e.g. Keeping Children Safe in education for further guidance. Some areas for inclusion might include; SCR, Safeguarding policy, training including Prevent and procedures. This area should be validated through a formal external safeguarding review and case studies. Health and safety procedures, policy, training and again supported by clear validated evidence. Data on key areas such as attendance (grouped data), persistence absence, exclusions compared to national data sets Student questionnaires and reviews as evidence to support outcome conclusions. Parental questionnaires and where appropriate business partners. Pupils attitudes to learning and the creation of a positive ethos Mock Ofsted information on behaviour and behaviour management strategies, policies and procedures please delete this guidance before submitting this form]		

Quality of leadership in, and management of, your school	[This area focuses on the impact of leaders and governors and should look at how safely, efficiently and effectively the school is run. This area covers leadership and management across the school and how it enables pupils to learn, achieve and overcome specific barriers to learning. The Ofsted framework identifies detailed areas for review as does the National College such as the headteacher Standards however these need to be validated by others such as an NLE, SLE, NLG or an evaluation by a partner outstanding school. Key to this area is how accurately the team evaluate the schools strengths and weaknesses and use their evidence to secure future improvements. It should also include a focus on capacity of leadership and management to manage the change from independent school status to an academy with a larger and more diverse cohort of pupils. please delete this guidance before submitting this form]		

The extent to which the education and systems provided by your school meets the needs of the range of pupils at the school, and in particular the needs of disabled pupils and those who have special educational needs.	[pupil recruitment and how the education will be adapted to meet the needs of all - progress on financial planning and cash management systems, including appointment of finance director - budget predictions and resource for ongoing budget management - trust's plans for ensuring funding agreement compliance - ensuring adequate systems and controls in place, including accounting software package please delete this guidance before submitting this form]		
Any other comments or observations not captured above. Please note, AP schools should state whether they are registered and if their existing provision is interwoven with the LA.			

Governance self-assessment

Your assessment against the Governors and Academies Financial Handbook		Your assessment of current position (How you do it now)	How will you get to required position? (F2) – Please list risks, actions plan (including priorities identified) and timescales
1. The roles and responsibilities of the directors/ trustees	Please detail your duties as: • company directors and charity trustees; • accounting officer Understanding of the strengths and weaknesses of the school. Understanding performance data (what data do you use), how do you use it to ensure robust oversight of performance (including externally provided data for example data dashboard the school presents) Holding school leadership to account		
2. Structure of the board	Accountability system Structure of decision making		

3. Meetings	Please detail your board and committee meetings schedule and outline agenda		
4. Finance	Please give details of: • your chief financial officer, with appropriate qualifications and/or experience; • Schemes of delegation; • Approvals process-budget; • Investment policy; • Procurement including leases; • Internal control framework; • Contingency and business continuity plan; • Insurance cover		

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