Twyford CofE Academies Trust

Trust Advanced Programme (TAP)

The Trust Advanced Programme (TAP) aims to stretch students beyond the curriculum in order to develop the knowledge and skills needed for the most competitive university courses.

There are a number of components to the Trust Advanced Programme:

- TAP weekly Taught Sessions and Wider Reading Sessions
- Tailored support for those applying to Oxford and Cambridge
- Students have the opportunity to join one of the following Scholars Programmes:
  - Engineering Scholars
  - Medic Scholars
  - Maths Stretch
  - Humanities Stretch
- They may also undertake either an Extended Project Qualification (EPQ) or CREST award
- Students are encouraged to independently extend their knowledge and skills by attending a wide range of CASE lectures and seminars and reading articles from the Wider Reading Newsletter.

Any questions please email Mrs Davies (Deputy Trust Advanced Programme Co-ordinator) at vdavies@williamperkin.org.uk

TAP Sessions

a) Taught TAP Sessions

TAP Sessions are designed for students who have achieved an average of grade 7.5 or above in their GCSEs. The programme is there to further challenge students who are targeted A/A* in their A Levels and support them to develop the critical thinking skills necessary to apply for competitive courses at top universities, including Oxford and Cambridge.

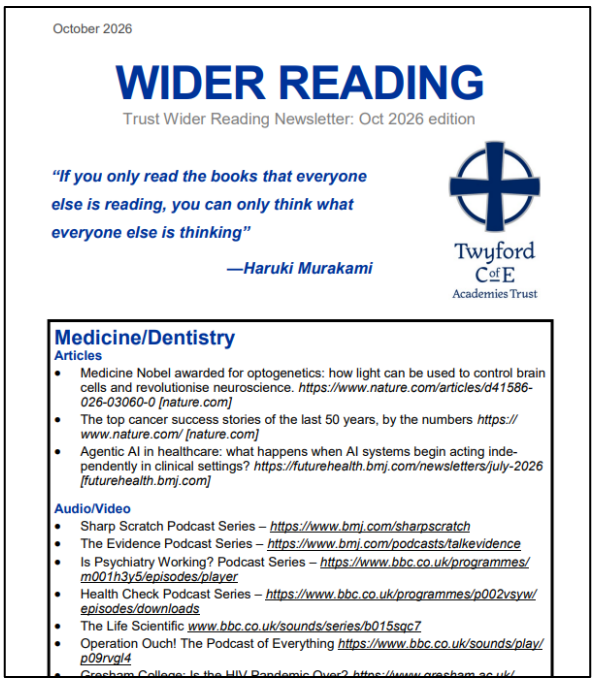
In Year 12 all students will receive weekly lessons covering independent research, critical thinking skills and advanced academic coaching. Students will be encouraged to extend their knowledge, draw cross-curricular links and articulate their ideas.

The sessions will also support students with their university applications through guidance on competitive open days and summer schools, entrance to university essay competitions and personal statement support. Students will have the opportunity to attend the Trust Admissions Assessment Day to support them in their preparation for university admissions tests such as the UCAT and ESAT.

b) TAP Wider Reading Sessions

To ensure the strongest possible university applications, students will need to have read around their interests within their chosen field. Students will receive a half-termly Wider Reading Newsletter, with 21 different subjects included. For each subject, there will be articles, books, podcasts, documentaries, free exhibitions and lectures in London.

All Sixth Form students receive a copy of the Wider Reading Newsletter and will be encouraged to further their knowledge beyond the curriculum. Those students who are part of TAP have a weekly timetabled session to complete wider reading in their chosen area of interest.



October 2026

WIDER READING

Trust Wider Reading Newsletter: Oct 2026 edition

"If you only read the books that everyone else is reading, you can only think what everyone else is thinking"

—Haruki Murakami

Twyford C of E Academies Trust

Medicine/Dentistry

Articles

- Medicine Nobel awarded for optogenetics: how light can be used to control brain cells and revolutionise neuroscience. *https://www.nature.com/articles/d41586-026-03060-0 [nature.com]*
- The top cancer success stories of the last 50 years, by the numbers *https://www.nature.com/ [nature.com]*
- Agentic AI in healthcare: what happens when AI systems begin acting independently in clinical settings? *https://futurehealth.bmj.com/newsletters/july-2026 [futurehealth.bmj.com]*

Audio/Video

- Sharp Scratch Podcast Series – *https://www.bmj.com/sharpscratch*
- The Evidence Podcast Series – *https://www.bmj.com/podcasts/talkevidence*
- Is Psychiatry Working? Podcast Series – *https://www.bbc.co.uk/programmes/m001h3y5/episodes/player*
- Health Check Podcast Series – *https://www.bbc.co.uk/programmes/p002vsyw/episodes/downloads*
- The Life Scientific *www.bbc.co.uk/sounds/series/b015sqc7*
- Operation Ouch! The Podcast of Everything *https://www.bbc.co.uk/sounds/play/p09rvgl4*
- Gresham College: Is the HIV Pandemic Over? *https://www.gresham.ac.uk/*

Oxbridge Preparation

As part of the Taught TAP Sessions students are also prepared for application to Oxford or Cambridge University (Oxbridge).

In Year 12 students can expect:

- Lessons introducing the Oxbridge system
- Detailed look at course and college data
- Oxbridge-specific personal statement support
- Information regarding open days, masterclasses and summer schools at Oxford and Cambridge
- A Trust Oxbridge preparation summer school
- Information and support in applying for mentoring schemes
- Specific guidance for students of African and Caribbean heritage

In Year 13 students can expect:

- One-to-one support in writing and editing personal statements
- A Trust Oxbridge Interview workshop
- A mock Oxbridge interview held by governors, directors and lead members of staff

UNIVERSITY OF CAMBRIDGE

UNIVERSITY OF OXFORD

Engineering Scholar Programme

The Engineering Scholar Programme is aimed at students wishing to pursue an Engineering based university degree. The programme will support students to learn about studying this popular subject at university along with the huge variety of careers it will open up.

In Year 12 students can expect:

- Sessions introducing different types of engineering
- Mini-research projects based on engineering in current affairs
- Scientific modelling and evaluation
- Workshops on topical engineering issues
- Debates
- Support with ESAT preparation
- Interview practice

In Year 13 students can expect:

- Tailored personal statement support
- University interview training



Medic Scholar Programme

Medic Scholar is a program for aspiring doctors and dentists. The program runs for two years supporting like-minded individuals through the exciting and challenging journey to becoming a medical professional.

In Year 12, students can expect:

- Support sessions designed to help students develop their medical portfolios ready for university applications
- Information about work experience and volunteering
- Discussions and presentations on Medical Ethics and NHS 'hot topics'
- External speakers in different medical fields
- Personal statement support
- Imperial Poster Competition
- Book club
- Pharmacy talk and information
- UCAT advice and guidance
- UCAT webinars

In Year 13, students can expect:

- Personal statement workshops
- Mock interview advice and preparation sessions
- Mock interview practice following the more commonly used MMI style of interview



Maths Stretch

The Maths Stretch programme is designed to support students preparing for rigorous university admissions tests in mathematics such as the TMUA (Test of Mathematics for University Admission), addition to their Mathematics and Further Mathematics A Level courses.

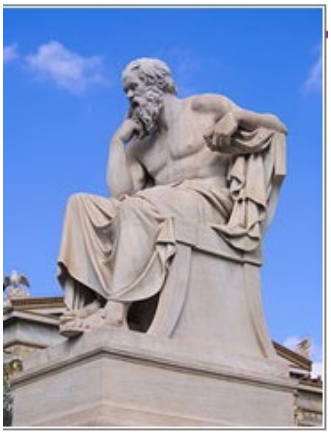
Students are taken through a demanding scheme of work and are required to complete additional problems outside lessons. Highly regarded by our highest achieving mathematicians, stretch lessons introduce students to undergraduate-style problem-solving, featuring questions that are longer and less structured than those typically encountered in A-Level Mathematics and Further Mathematics exams. Students aiming for top universities to pursue a degree in mathematics or a related field are strongly encouraged to attend these weekly sessions.

In Year 12 students can expect to cover the following themes:

- Trigonometry and Geometry
- Differentiation and Integration
- Logarithms and Powers
- Algebra, Polynomials
- Primes and Proof, Recursion

In Year 13, students may be required to sit one or more admissions tests. To prepare, students work through past papers with the support of a specialist maths teacher.

Humanities Scholars



The Humanities Stretch programme is designed for students who wish to explore pathways in History, Politics and Law (and careers in these fields)

In Year 12 students can expect:

- Regular debates based around wider reading such as *Does revolution always lead to progress? Is there any need for a United Kingdom anymore?*
- Discussions of topical cross-curricular themes
- Trips such as to the Supreme Court and the YoungPower Conference
- LNAT admissions test support for those applying for Law

In Year 13 students can expect

- Tailed personal statement support for those applying for humanities subjects
- Individualised LNAT support
- Mock university interviews with external professionals/academics in the relevant field

Extended Project Qualifications (EPQs)

These projects involve detailed research into any topic of the student's choice, allowing them the opportunity to go outside and beyond their A Level subjects. Students will do the vast majority of this research in the Easter Holidays and Summer Term of Year 12 and will work one to one with a supervising member of staff to turn this research into a piece of extended writing.

The projects can take the form either of a 5000 word essay, or an artefact (such as a piece of art, a science experiment or a film etc) accompanied by a 1000 word essay.

EPQs equip students with the skills needed to bridge the gap between A Level and undergraduate style learning, as well as looking impressive on personal statements. They also provide university interviewers with a topic to discuss with the applicants, which can demonstrate the breadth and depth of the student's knowledge and interest in their subject.

Examples of previous projects:

Subject	Title
Medicine	To what extent can effective altruism mitigate the prevalence of medical neo-colonialism ?"
Biology	How can the FISH (Fluorescence In Situ Hybridisation) technique be used to detect HER2 gene amplification in breast cancer samples, and how does this influence the choice of targeted treatment such as Herceptin?
PE	To what extent is psychological intervention more effective than physical rehabilitation in rebuilding athlete confidence post-injury?
History	Blip or Catastrophe- What was the Antonine Plague to the people of Rome?
Physics	An Evaluation of the Key Factors Influencing Heat Resistance in Hypersonic Flight: Materials, Aerodynamic Design, and Cooling Systems.
Architecture	'The West London Culture and Arts Centre': a design proposal.

CREST

CREST is an opportunity for students to work in groups to complete their first science research projects. It encourages them to think like scientists and is an opportunity to apply science to everyday life, using skills such as creativity and communication.

The project has to offer an original contribution to a STEM field of study and therefore the project is unique. During the process students hone their investigative skills and employ scientific method to conduct their own piece of research.

At the end of the project students present their final projects at Imperial College and receive their awards if they have met all the CREST criteria.

Over the last few years in the Trust students have had successful projects in building and testing historically accurate catapults; investigating the feasibility of mining near Earth asteroids; testing pollutant levels at different sites across the River Brent; investigating antibacterial properties of common herbal remedies; and creating and testing polymers made from different vegetables.



CASE Lectures and Seminars

CASE lectures and seminars are run by departments to extend students beyond their A Level courses. Lectures are given by external speakers or by members of staff with a specialist interest. Seminars involve smaller group discussion, and often require students to do some prior reading in preparation for them.

CASE lectures and seminars are designed for all students but those aiming for the most competitive courses are encouraged to attend as many as possible to take full advantage of the provision available.

Examples of past lectures and seminars:

Subject	**Title of lecture or seminar**
English	Waiting for Godot: A full reading
Psychology	What is he relevance of bilingualism and language learning from a cognitive, cultural and emotional point of view in a world where AI is increasingly being used?
Biology	The Red Queen Effect
Mathematics	Cardinal Arithmetic
History	History without an end?
Economics	Effects of Inequality and Climate Change on Government Policy
Medicine	Alzheimer's Tau Plaque Degradation

External Opportunities

Students are frequently notified of external organisations and opportunities to broaden their knowledge and skills further and each year students are successful in their applications to these.

These include:

- Academic Attainment Programme (University of Cambridge)
- STEM SMART (University of Cambridge)
- St John's Inspire Programme (University of Oxford)
- Imperial Maker Challenge
- Lead in to Law (Slaughter and May)
- Worshipful Company of World Traders (Scholarship; Tacitus Lecture; Window into the World of Work)
- Partnership with:
    - Harrow School (eg Careers Fair; lectures)
    - St Paul's School (eg Humanities Conference)

Twyford
C of E
Academies Trust