

STEM CAMP

STAAR is designed for Year 10 students who demonstrate an interest or aptitude for one or more STEM subjects. It is a fully funded immersive week-long, hands-on residential camp, like no other. Successful students stay with chaperones on base at RAF Cosford, and each day of the course is delivered at the RAF Museum or on base at RAF Cosford by RAF Museum STEM Ambassadors, industry experts from Northrop Grumman, Tablet Academy professionals and RAF STEM personnel.

Overall, camp was amazing, although when I arrived, it was evident that everyone was a bit nervous about being stuck with strangers for a week! But, after we were all introduced, we started with some team building, and despite some arguing (we were all perfectionists), we all got to know each other pretty well. All we had been told was that we were there to learn about Aerospace Engineering, and many of us were quite alarmed at the prospect of designing an unmanned aeroplane on our first morning, because nearly all of us knew next to nothing about aeroplanes. The staff were very kind however, and we started lessons on design almost right away.

However, we did far from just lessons. On our second day, we had to design and make a glider out of foam, paying attention to our lessons on balance, air resistance and gravity. After many hilarious failed attempts, every team had a solid glider to display,



which was attached to a catapult and launched into the air, while we measured how fast, and far, the glider went.

Unfortunately, my team didn't win, and we learned why. We hadn't paid attention to our lesson on balance, so our plane was top heavy, taking a lot of clay to balance it (but we got a lot of points for our design!)

Over the course of the week, we had many similar design challenges, and toured many different planes in our special flight suits, although sadly we didn't go up in a plane as we had hoped. To receive our STEM award we had to design an unmanned plane on a special app, which would be suitable for collecting environmental data. We also needed to explain how it would stay up, balance etc, and create a presentation on everything we had learned. I remember how long we worked on it and the panic the next morning to get it finished! It was difficult to get it all done, as we also had to do daily diaries answering questions with full paragraphs, as well as many surveys to fill out, which nearly all of us forget about and had to do in a hurry!

Although we stressed a little on the project, the week was incredible due to the fact that I had made many friends and learnt so much in that time. The award ceremony was especially wonderful, as you got two awards with a third (the Crest Award) imminent. I hope next year to do the challenge again at a higher level, as it is a wonderful experience with so much learning, but also so much free time and fun as well. It was brilliant.

Many thanks to Oakgrove School for nominating me to attend this.

Eleanor Charman

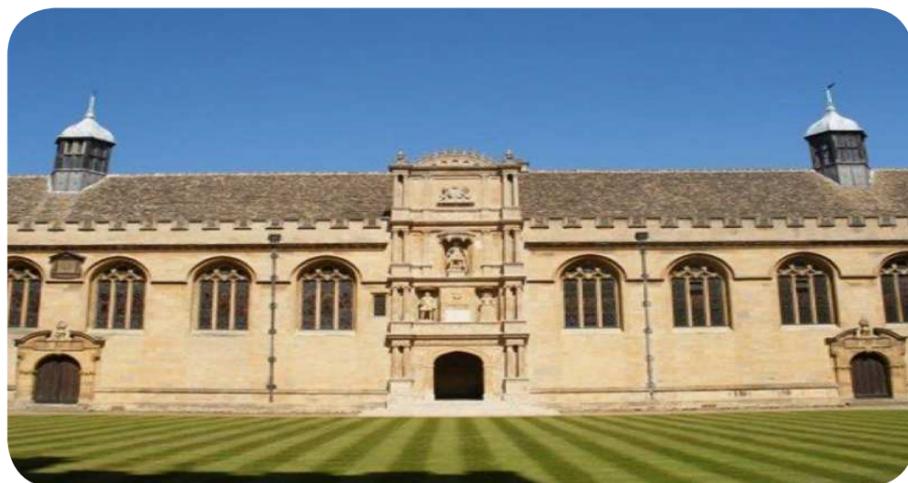
WADHAM COLLEGE • OXFORD October 25th 2019

On arrival, Wadham college looked a daunting place: the size of the buildings, the huge, open verges of grass and the extraordinary scenery. Greeted by Dr. Catherine Seed, we instantly felt welcome, we felt the community within the college and the excitement built.

The first destination was the postgraduate research centre, where we were taken into a seminar room to have a brief introduction of Wadham. We were told what we would be doing in the day and were instantaneously intrigued and ready to begin. Our first activities, were talks on law and neuroscience, where we were split into two groups to take turns. My group had the neuroscience talk first, where we learnt about different areas in the brain and how they are active whilst doing different activities. The leader of the talk was a student at Wadham who was studying neuroscience. We were given a sheet where we had tasks to complete based on what we had learnt and it was very interesting as we had never learnt such a topic before. This talk gave us the opportunity to widen our knowledge on subjects that we did not expect to be learning about. After the neuroscience talk we made our way down to the room where we would discuss law, with a law lecturer - which was a great experience. We had a small debate about the misuse and possession of drugs and learnt about the laws that are in place to tackle this. It was very interesting as everyone had a view and we were able to express our opinions very easily. We had the freedom to have a debate and to express our thoughts.

Secondly, each group was taken on a tour by two students at Wadham where we were able to see the different areas of the college, for example - the student accommodation, one of the libraries, the chapel and much more. This helped me to understand that the college wasn't as daunting as we had expected. During the tour, these students discussed their student lives and what happens on a normal day at Wadham. We then returned to the seminar room where we did a Q and A with the four students; asking things about the college and the life as a student at Wadham.

After having lunch, Dr. Catherine Seed took us out of the college on the short walk to the natural history museum. This was a very interesting experience as we came across things like live cockroaches, preserved owls and skeletons of animals that were very old. We were able to walk around the museum and see various different things; a bee hive, spiders and snakes.



Throughout the day, we were able to experience something that we had not done before. We were able to learn about life as a student at university and be provided with insights into how Wadham is as a community. It really changed my view on university; it made me think about what I would like to do in the future of my school life as I was not sure before. I would now be really interested by going to university in the future and I am glad that I was able to have this experience.

YEAR 11

Careers Guidance Meetings

& CAREERS ACTION PLANS

Mrs Sheard the school's Careers adviser has been meeting with every Year 11 student this term. The meetings are designed to ensure students have a full overview of the choices they have Post 16 and gives an opportunity for students to receive personalised advice and guidance. Following the meeting students and their parents/carers are sent a summary of the discussions and action points highlighting the next steps students should be taking in researching and applying for the opportunities available to them. A majority of students will have had their meeting by the end of the Autumn term with the remainder being seen by the end of January.

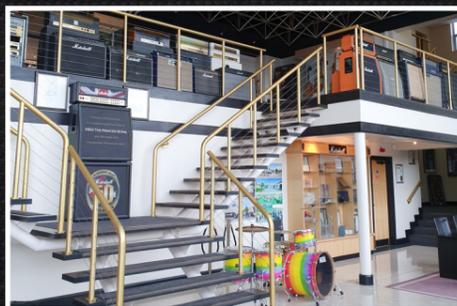
Students have also created their own careers action plans this term – these have been sent home to parents and carers and form the basis of their guidance meetings as well as allowing us to create a database of student's future interests. When organising guest speakers, trips and other careers related activities the database allows us to identify which students would benefit the most, thereby tailoring the support we offer.



Marshall TRIP

Staff at Oakgrove were invited to the Head Office of Marshall Amplification. When we arrived we were given the exciting history of the local company and its world wide spread, we learnt many famous rock bands and artists flock to Bletchley to get custom made amps. We got a rare opportunity to see the factory floor where the higher end products are meticulously hand made by a dedicated small work force, many of whom have been there over 20 years, and many of whom are women. We saw each of the areas involved in the manufacture of the amps including – Engineering, Electronics; Soldering, Wiring, Testing, Carpentry, Spraying and Finishing. The tour guides also explained how customers may personalise the amps with designs on the frets, coloured leather casing and altered valves for different sounds.

The guides explained how the manufacture was only half of the work force, and the other half had jobs in Human Resources, Marketing, Social Media, Servicing, Sales and Admin. At the end of the tour we went into the museum and witnessed amps from artists such as Paul Weller, Slash, movies like Spinal Tap and even an original prototype worth over £500,000! Marshall amps also have an arena at the MK Dons stadium and attend careers events such as the MK Apprenticeship show. Staff are already planning student trips to visit to Marshall linking it to the Design Technology and Music Technology curriculums.



WOMEN Engineering DAY @ niftylift



This year Oakgrove were invited once again to Women in Engineering Day. Girls in Year 10 had the rare and exciting opportunity to take part in Women in Engineering day at Niftylift. The day started with a talk and introduction to woman who are qualified Mechanical and Civil engineers and the vast array of skills the jobs require.

Shortly after the talk the girls got stuck into a tailor made activity to understand the working mechanics of the cherry picker, focusing the hydraulics of the boom arm, using a 3D printed model and liquid filled syringes the girls got to build and control the miniature cherry picker, Oakgrove girls were the quickest at building the models and worked really well as a team.

Later the girls undertook a factory tour where the cherry pickers are designed, developed, manufactured, tested and repaired, the tour was guided by an engaging and informative Apprentice who gave an exciting insight to the work of working whilst learning, and encouraged the girls to undertake the application process for Work Experience or Apprenticeships at Niftylift. After the activity and tour, the girls got to speak to some of the inspiring female engineers and ask questions about the industry and ways to get into STEM careers. Once student has already expressed interest in a career in Mechanical engineering off the back of this trip and all said they would consider a job in a creative, scientific or engineering field following the visit.



OXBRIDGE APPLICANTS'



trip to St Paul's OXBRIDGE INTERVIEWS SESSION

On Wednesday 20th November, seven Year 13 students, accompanied by Mr Kendall, travelled to St Paul's School for a session led by a representative from the University of Oxford. The session was intended to prepare students for their upcoming interviews at either Oxford or Cambridge. The engaging presenter talked through the process applicants would be going through at both universities and provided plenty of useful tips for the students, especially regarding sources of wider reading that students can be doing. All the students were glad they'd attended the session, with their minds put a little bit more at ease about their upcoming interviews.

SPORTS ACTIVITIES:

Firstly we had an aspiring sports therapist come into our class and teach us about the nature of the job. We had a university student currently studying sports therapy visit us for a lesson. This was important for our course as it gave us an opportunity to learn about the career, which is essential for our first assignment. We spent an hour learning about a career in sports therapy. We were taught about what qualifications were needed for the career, and how you complete certain tasks within them. We were also informed on the skills requirements of the career and what it involved, as well as opportunities within the career such as traveling abroad with a sports team.

Secondly we had a trip to Network Rail. This trip was based around learning how to carry out interviews, both as the interviewer and as the interviewee. First we had a presentation where we learnt about the key aspects of interviews, and how to have a successful interview. We then split into groups where we had to interview each other, with someone assessing how we did. It was very effective in allowing us to learn how to conduct an interview in a professional manner.

Oliver Smith

APPRENTICESHIPS

In November students in Year 11 and 13 had an assembly about Apprenticeships, hosted by Hollie from Ask Apprenticeships which gave a thorough overview of apprenticeships as a pathway open to students Post 16 or Post 18.

<https://amazingapprenticeships.com/about-ask/>

In the same week this was followed by an application workshop in school on the INSET day. In the morning students taking part investigated how to respond to questions likely to appear on an application form, identified how to communicate their strengths, skills and experiences and created a CV. During the afternoon workshop students were introduced to the type of online tests often required as part of the assessment process and quickly realised that these are not simple and require preparation! Students also undertook some activities commonly found at assessment centre days and gave each other feedback on their participation. Finally, students received tips on how to handle interviews.

In March on the next INSET day we will be taking 2 coaches of students from Year 10-13 to The National Apprenticeship show at Arena:MK. This is a great opportunity for students to speak to over 100 local and national employers who offer apprenticeship schemes. Sign up letters will be available in the new year.

<https://www.nationalapprenticeshipshow.org/midlands/>

The careers team are keen to support students who are interested in this competitive route and from April to June students in Year 11 and 13 will be Emailed (to their school Email address) a list of apprenticeship vacancies available for application in the local area. This information will also be shared with parents and carers via our school comms system. This should help students who will also be juggling revision and sitting their GCSE/ A level exams at the same time. Year 13 students applying for Higher and Degree Apprenticeship vacancies will find that a majority of vacancies at these levels are advertised October to March and students are currently being sent Emails from Mrs Sheard our Careers Adviser each time an opportunity is advertised.



Most apprenticeships are advertised on this website:

<https://www.gov.uk/apply-apprenticeship>

but additional vacancies can be found via social media and companies own websites.

HERE
FOR YOU

Advice online,
over the
phone,
face-to-face



IMPARTIAL CAREERS ADVICE

Want to speak to someone from outside of school?

NATIONAL CAREERS SERVICE

Call: 0800 100 900

Text: 07766413219

Or go to their website for a webchat

nationalcareersservice.direct.gov.uk/contact-us/home



ASTON MARTIN TRIP

Congratulations to the students who won the KS3 Rotary Club Design and Technology Competition and were rewarded as follows.

On 21st November, 4 students, Toby Fieldhouse, Hannah Clarkson, Bekka Taylor and Poppy Latimer were invited to the Newport Pagnell Heritage Centre for Aston Martin. These 4 students were the ones that had previously been victorious in winning the Rotary Club Design Competition back in March 2019. Students went around the servicing dept where people send their car to be cared for and had a behind the scenes tour of the heritage factory seeing some of the old DB4, DB5, DB6 etc and how they go through the extremely skilled and labour intensive restoration and repairs of some of the old classic cars. As one of the rewards of the team winning the tournament, they also all got a ride in a brand new Aston Martin DB11 which they all thoroughly enjoyed. Students were given some mementos as a reminder of the day to take home such as an embroidered leather Aston Martin patch and a book which only people who purchase an Aston Martin get.

Many thanks to Justin Pearce and Aston Martin Heritage for allowing them privileged access to go around and providing such a memorable experience.

NetworkRail

TRIP

On Wednesday the 18th of December I and my sport BTEC class attended network rail to discuss and learn more about interviews and the different techniques that we can learn to use. When we entered the grand building we were met at the door by the human resources manager named Tara, who gave us a brief overview of the building and what to expect in the meeting, we then went into the meeting room which had 4 other network rail workers and were seated in pairs. The workers then went over different tips and tricks to take into interviews with us, one of these being STAR: situation, task, action and result, I think that this technique will be useful as it means that you can fully answer the interviewer's question and genuinely get all your points across formally.

After learning about all of the different techniques from the workers we then had a turn to in pairs interview each other whilst using the different techniques we had just learnt whilst one of the workers was watching and reviewing us, afterwards we were then given feedback of what we did good and what we could do to improve from the worker watching us. I learnt that I need to improve on my specifics when talking about an achievement or previous experience, for example filling the time by talking about the dates and what the task was and the context behind all of this. Overall I think that this trip went well as I came away from it feeling more knowledge and confident to go in prepared for my next interview.