

I've spent the past seven years studying at Pate's Grammar School, Cheltenham, and have just finished my eclectic mix of A Levels, taking English Literature, Chemistry, History, and Biology. Outside of school, I've been part of the Scouting movement for the past eight years, working towards my Gold Duke of Edinburgh and Queen Scout Award, and acting as a Young Leader of a local Cubs group. I'm a keen violinist and an avid reader, juggling my interests with school life. Pate's has a brilliant atmosphere; in a school where Common Room discussions range from last night's television, to the state of the coalition, to aesthetics in T.S. Eliot to imaginary numbers, a group of us immediately jumped at the opportunity to enter the UK Space Settlement Design Competition, and spend a weekend at Imperial College London.

After selling endless cakes to sugar-deprived students to fundraise for our accommodation, and persuading the long-suffering Dr and Mr Houlton to accompany us on the trip, it didn't seem long before we were packed into the minibus and on our way down to London, excited and a little apprehensive. After the incredible success of the previous year's Pate's team, six of whom had become international winners in last year's final, we were...nervous, to say the least! Students were also travelling from places as far-flung as Lumen Christi College, Northern Ireland, and together with students from Sheringham High, Chatham Grammar School for Boys, and City of London Academy, on Saturday morning we became 'Grumbo Aerospace,' our fictional aerospace company.

After a whirlwind of morning lectures and presentations, our team of over thirty students was hurled into an industry simulation; we were given until 7am the following morning to come up with a fully outlined design for a luxury space liner, capable of transporting 8000 people to Mars. As president of our company, it was my responsibility to organise and co-ordinate between the different departments, integrating finance, structural design, automation and operations against the clock. When I was made president, I really had very little idea what to expect; I'd been promised hard work and stress, and certainly got both, in equal measure. From pep talks, to looking over transport proposals, to checking floor plans, it felt as though I needed to be everywhere at once, and that, as soon as one issue was resolved, there was something else that needed doing.

There were multiple setbacks as the day wore on, as teenage engineers attempted to turn myriad diagrams and equations into a feasible design, and the finance department attempted to budget the whole operation. My thoughts at the time; almost certainly "what have I gotten myself into?", as we passed 10pm and the presentation was still in pieces. However, with impressive determination and hard work from the team, slowly but surely the pieces started to fall into place in the early hours of the morning. As we clustered round tables in the commandeered dining room of Putney Premier Inn, fifty presentation slides emerged from the debris of coffee cups and mountains of paper, as we met the 7am deadline with just minutes to spare.

The pressure of the job was huge, but the hard work was undoubtedly worth it. It was incredible to see, even ten hours after we'd begun, everyone in the team still incredibly focussed and working together at such a high standard. I was very proud to stand alongside my team, in front of 400 people and a panel of judges, to present a fully fledged design that had been a vague concept less than 24 hours before. When the results were presented, and 'Grumbo Aerospace' shown in big, bold letters on the projector screen, all tiredness was forgotten as we descended into a shrieking, cheering, elated rabble. As we received our medals and congratulations from the competition organisers, it really sunk in just how much I had learnt in the space of a weekend, extending far beyond the science itself; our determination and hard work had pushed us well out of our safety zones, tested our personal limits, and showed us what we are capable of achieving. I'm thrilled to be one of those going to Houston this summer, to participate in the International competition final. Success or not, I anticipate a lot of hard work to be done, and more good friends to be made.

To other girls thinking of entering similar competitions, I can only say; go for it! Despite brilliant GCSE results from girls in the sciences, unfortunately science as a school subject, a career, and just something to be interested in still has a reputation as being both male dominated and male orientated. Proving that this needn't be the case is the first step towards changing attitudes; working alongside fellow students at Imperial, it was the skill and innovation from each of the team members that pulled the project together, with gender an irrelevance. If you're intelligent and enthusiastic, opportunities are endless and science has so much to offer you, whoever you are.

As for me, with exams over and university on the horizon, the future no longer seems the enigma it did amidst last year's chaos of UCAS applications and university interviews! Exam results permitting, I hope to take up my place to read Law at Cambridge this October. Whilst academically, I've chosen the path of "the Arts," we all live in a world of daily scientific discovery and pioneering technology. It's impossible to remain untouched by science, and from reading New Scientist to visiting Cheltenham Science Festival, I fully intend to keep up my interest in the scientific world.