

London Design & Engineering UTC

# Spring Update

2023

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# Rosie's gift

# Welcome









Intel, who make micro chips, and describe themselves as creating world-changing technology that enables global

progress and enriches lives, have chosen LDE to be their showcase for 2023. They have made a video about Ernestas in year 13 detailing his journey through education. This is an amazing endorsement for how and why LDE is different from mainstream schools and recognises how Ernestas has embraced every opportunity, providing him amazing conversations for interview onto his next progression.

The staff of LDE never fail to amaze me, their relentless drive to provide amazing opportunities for our learners is incredible. Like our learners, our staff are also being recognised for their contributions. In a recent Education Select Committee discussing careers education the Chair expressed that "every school or college should have a Janice" recognising the many opportunities provided for our learners and how every learner in the country could benefit with Janice's support. LDE were also chosen by Ofsted for their Geography research study, the inspector said "if we could clone Sabrin, we could put her in every geography department in the country, making geography great throughout the UK" Finally Intel endorsement of LDE show casing James work around our digital transformation.

I am sure that our parents/carers must be very proud of their children's achievements just like I am. Remember you can only provide informed judgement if you took part so please, please "don't look back on missed opportunities" grasp every experience and better yourself.

Keep safe

Geoffrey

**CEO & Principal** I DF UTC





# **Built Environment- Holland Harvey**



RIBA and Holland Harvey Architects provided our Year 13 Built Environment Learners an amazing Employer Led Project (ELP) opportunity. The three-month ELP long focused on understanding the RIBA work stages as well as supporting our learners Unit 2 of the Built Environment course.

This year, the site chosen for this regeneration project is Canning Town Pocket Park. During the site visit, our architects were tasked to identify strength and weakness of the area as well as the opportunities, threats and geographical quality of the area. Learners then produced presentations with A range of exciting ideas for the regeneration project with community centres, sports and outdoor community spaces, cafés with unique features and rooftop gardens.



## **Science- Rocket Project**



Our year 9 learners were challenged to design and build a water rocket using recycled drinks bottles. This employer led project brought many key topics on the science curriculum to life, such as the centre of gravity, the centre of pressure, Newton's third law and thrust, drag and weight.

Before beginning the project, learners also enjoyed a masterclass from LDE's head of Aviation Simon, who covered a range of topics about the aviation industry including how to get into pilot training, with specific references to his vocational background, and what he enjoys most about his job.

This masterclass helped our learners not only explore key concepts such as propulsion, aerodynamics and the forces that affect rockets and airplanes (lift, weight, drag, and thrust), but also gain insight into the fascinating career of a pilot.

'The learners produced some really impressive rockets; one even flew as far as 18 metres which is our record so far! The learners were invested in creating distance-time graphs which was very relevant to the Science course. They used their understanding of forces to build amazing rockets.' Mohamed, science teacher.

# **Balfour Beatty: Across the college**



### **Business**



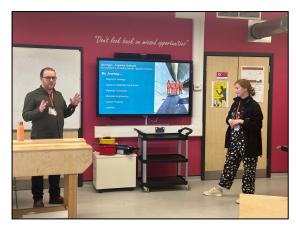
Balfour Beatty joined our year 12 business learners to launch an exciting Employer Led Project exploring how 'innovation and enterprise contributes to the success of a business.' Our learners were visited by Graduate Proposals Coordinator Elizabeth and Business Management Graduate Paige.

'Our business learners are required to create and pitch a presentation about innovation and enterprise as part of their assessment. By using real companies to support our learners with this assessment, they are motivated to approach their presentations from a real-world context,' Sharian, Business teacher.

### Design

Daniel and Penney from Balfour Beatty joined our year 10 Design learners to launch an Employer Led Project aligned the topic 'Materials and Design' found on the curriculum. During this project, learners will explore 'factors to consider when selecting materials for a project/product' through the perspective of the brief set by Balfour Beatty.

'For the year 10 curriculum, learners are required to learn about materials and material selection so that they can use it in year 11 during their Non-Examined Assessment. Learners



have worked theoretically at factors affecting the choice of material such as availability, sustainability, and aesthetic. This project, however, offers learners the opportunity to have these choices applied in a real industry context with the support of an employer,' William, Curriculum Lead Design.

### Maths



Our year 10 maths learners were joined by Siria from Balfour Beatty for a masterclass on scale factor. Siria is a Graduate Highways Design Engineer. Her job role involves road design, drainage systems, road signs and road markings and traffic management.

'Our learners enjoyed discussing different sources of renewable energy. Through this masterclass, learners were able to use actual technical drawings and see firsthand how scale factor is applied in real life industry contexts when plotting wind turbines,' Lena, Maths Teacher.

# Apprenticeships- pathway CTM





As a part of National Apprenticeship Week, LDE UTC hosted Pathway CTM for their 'Get Into' Apprenticeships event. Open to all learners in the college, this event offered those considering apprenticeship the opportunity to find out if this was the correct pathway for them.

With employers from companies such as PwC, KPMG, and Deutsche Bank engaging in a discussion panel, learners heard about what apprenticeships have to offer and what it takes to be employed as an apprentice in industry leading institutions.

Thank you to Pathway CTM for hosting such a valuable event that has no doubt broadened the horizons of the learners who attended. Hearing from employers who hire

apprentices as well as apprentices who are working in various industries has equipped our learners with invaluable insight that can only be gained through Employer Engagement opportunities such as these.

'Pathway CTM provides amazing opportunities for young people to find out about apprenticeships and connect with leading companies in a range of industries. We are glad to be working with Pathway CTM and looking forward to our learners exploring further opportunities to help build the knowledge, skills and behaviour required by employers.' Janice, Careers and Employer Engagement Lead.

# **Careers- Mock Interviews**

Our Directors, Sponsors and Employers joined together to coach our year 11, 12 and 13 learners through the interview process. Leading companies across various industries sat through a forty minute interview, asking learners competency based questions and offering feedback from their responses.

Companies who came to support our learners include Lendlease, Jerram Falkus, Tideway (Jacobs), Costain, Skanska, Thames Water, Morgan Sindall, Ramboll, Kilnbridge, Higgins, Bouygues.



These mock interviews offered our learners the opportunity to engage in meaningful conversations with industry leaders, workshop their CVs and gain insight into different career pathways.

'I am always astounded by the level of company support at these events, these opportunities are what makes the difference to our learners as they move ever closer to beginning their careers as a higher or degree apprentice. Giving our learners a 'live' experience prepares them and allows them to consider the knowledge and skills that they have to respond to the interviewer with a considered answer. Thanks to everyone who gave up their time today to join us,' Janice, Careers and Progression Lead.

## **Careers Fair At LDE**



We held our very own Careers Fair; offering learners throughout the college the opportunity to network with leading employers, apprenticeship providers and universities.

We had over 35 companies join us in our main hall which included: Metropolitan Police, Royal Navy, British Airways, City Flyer, Britvic, Ramboll, Morrisroe, Morgan Sindall, University College London, City of London University, Aggora, Thames Water, Balfour Beatty, London South Bank university, Coca Cola, Network Rail, Costain / Tideway, Siemens, RAF, Berkeley Group, Higgins, Skanska, Schneider Electrics, CITB, Transport for London, Loughborough University, University of East London, Mace, Wates, University of Hertfordshire, Escape Studios, Kilnbridge, London Interdisciplinary University, ASK, Newham Workplace, Fujitsu and Kingston University.



Career lead and mastermind behind this event Janice shared, 'It is essential that our learners get to meet employer and universities, and the careers fair is an ideal time for them to ask questions about their future career goals and the pathways available to them. The level of engagement from our young people was wonderful to see and the buzz in the air lifted the room. Learners at LDE UTC are exposed to many opportunities across the year, it is important that they take as many of them as possible.'



The exhibitors commended our learners' outstanding behaviour and attitudes, as they invested in meaningful conversations to help inform their vocational ambitions.

Learners left the hall with valuable information about the opportunities available to them after they leave the college, as well as bags full of goodies that many companies kindly brought with them to hand out on their stalls.

Thank you to every employer who made the trip down to our career's fair and contributed to such a successful event and well done to our learners for the making the most of this amazing opportunity.



To watch a video summary of our Careers fair, click here





#### Maya on Holland Harvey:

'It was a new experience presenting to an architectural firm and understanding how to convey my ideas to them. It was valuable to get feedback from leading employers in this field,'

#### Maryam from Uptree:

'I really enjoyed sharing the Uptree platform with the LDE learners and look forward to seeing many registrations as they begin participating with our opportunities!'

#### Holland Harvey:

'We saw many creative designs and learners rose to the challenge of considering key topics such as sustainability and community, which are core values in our studio and within Architectural practice. By working with us we hope they were able to gain new skills and valuable insight into our profession which will hopefully have helped them with their choices for further education as well as longer term career aspirations.'

#### Santiago on the being the first college football team:

'It's an honour, in the first seven years since the college opened, we can say we're the first team to represent LDE. In years to come, learners will look back and remember us. In the future I hope to win lots of trophies with the team!'

#### Ferry and Monica from Morgan Sindall:

'All learners delivered fantastic presentations, detailing hazards and associated potential risks. We were really impressed by the high level of detail and effort put in by all learners.'

#### Samson on Sir Robert McAlpine site visit:

'This trip was an amazing behind the scenes insight into how different considerations influence how companies undergo construction, from the client, costs, to the environment it will take place in. I enjoyed seeing how these considerations and ideas are communicated to not only the main client working with the construction company, but also the potential users of the site where construction is also tailored to their need to draw more consumers.'

# LDE's first ever Award Night

London Design & Engineering UTC

For the first time in our history, we held an award ceremony celebrating the attainment and progress of our learners and alumni. Learners, staff, directors and loved ones came together to enjoy a delicious three course meal provided by Juniper Catering and served by our helpful year 12 learners, while listening to speeches from senior leaders, directors and a performance from our resident poet.

We kicked off the night with a virtual introduction from Jason Bradbury who spoke passionately about how far the college has come since its vision and conception. Jason was an integral part of founding the UTC and also acted as a governor. During his speech he shared one of the key values of our UTC: 'Another thing that is extraordinary to me is the college's close association with business. If anything is going to get you on that pathway to success as quickly as possible it's close association with people who are working in the fields you are studying, and I don't think you can find a better environment in which to make that happen.'



The night was a massive success as we saw learners, alumni, staff and loved ones all join together over a delicious three course meal and create history!

Victoria, Assistant Principal shared, 'It was an historic evening at LDE where we could celebrate alumni learners who have moved onto employment, university and other ventures as well as the achievements of our year 12 learners during their time in year 11. It was fantastic to see the joy on their faces as they received their plaques for all their hard work. A particular highlight of the night was when our ex chair of directors Jeremy presented the well-being award to our year 13 learner Ella, who did not know she was receiving the award. It really expressed how LDE, as a college prioritise and celebrate well-being. '

To watch the full video recap from our Awards Night, click here



We handed out attainment and progress awards, as well as an overall attainment and progress award. Our former Chair of Directors Jeremy also launched the well-being trophy, won by our year 13 learner Ella.

Reece, winner of GCSE Engineering Systems Control progress award shared, 'It was a great awards evening with a three-course meal which I really enjoyed. To win an award was a real privilege!'

Winner for overall attainment Enkhjin shared, 'The event was great, I loved it! I was happy to see all my friends get awards and it was nice celebrating with them.'





LDE learners from across different year groups, as well as staff members, joined forces with Fujitsu for a Design Thinking workshop to create a college wellbeing app.

The session began with the following challenge: At the college, we take our learner and staff wellbeing very seriously and, despite having several methods in place- we're not certain that these methods are benefitting learners and staff, and they do not provide the immediate support that is sometimes needed.

Through Fujitsu's version of Design Thinking called HXD (Human Centric Experience Design), our learners undertook a 6-hour workshop to try and resolve this.



Our Vice Principal Gloria shares the next steps for this exciting project, 'We are now waiting for Darren, the app developer from Fujitsu to complete the project he is currently working on, before we continue this amazing project. In the meantime, Darren will be looking at putting together a team from Fujitsu to work with us to plan the next stage... watch this space!'

We continue to prioritise well-being among our learners at the college. We are very excited to continue working with Fujitsu in order to put our learners at the forefront of improving access any support they may need during their time with us at the college.



In just one day working with Fujitsu, we have made great strides towards bettering well-being in the LDE community, but this is only the beginning. We want everyone who is a part of LDE to share how a college well-being can help address their individual experiences.

Following the session we put out a short survey to the LDE community to see if there is a demand for a college well-being app and had over 100 responses with the vast majority sharing that they feel a wellbeing app would benefit them.



## **Rosie Gifts the King**



Our Year 12 Digital Media Learner Rosie had the honour of presenting a gift to His Majesty, the King. This gift, created by Rosie with the support of Digital Media Teacher James and Engineering Teacher Derek, is a 3D modelled digital cypher still image held in a 5000-yearold Bog Oak frame. The collaborative effort to create this gift, reflects the collaboration seen in many of our Employer Led Projects that emulate the environments of the technical industries and destinations that our learners aspire to reach following their time at the college.

Rosie created the 3D digital cypher on 3Ds max, which was then put into Sketchfab to create the gold on the cypher and include a shadow and background. Rosie also designed and created a stamp with The King's Cypher, as her family are avid stamp collectors.



Rosie worked expertly, using programs and skills she has only been working with since beginning the Digital Media course in September. Developing these digital skills through Employer Engagement projects- with leading companies such as Promethean, Scruffy Dog, Escape Studios and many more- help our learners to realise the purpose of what they are being taught. This industry focused education ensures our learners receive Knowledge, Skills and Behaviours required to secure academic excellence and progression routes into industry via higher apprenticeships, university or straight into the workplace.

Once Rosie had completed her 3D model, Digital Media Teacher James had the honour of rendering the final image for inclusion into the frame. Once the gift had been finalised and framed, Rosie- alongside Geoffrey, Derek and James- went to present it to His Majesty. Rosie shares, 'Meeting the king was a once in a lifetime opportunity. When he came and shook my hand and I gave him the present I had created I saw a big smile on his face. He was really understanding and willing to listen when spoke about the gift. Watching The King greet everyone was amazing because I have seen him do it on the TV but to be there in real life, I honestly have no words for how amazing it was.'

'In February 2015, I had the pleasure of meeting His Majesty where I was able to talk about the plans of creating a new school. Eight years later LDE is fully formed, and we have the privilege of sharing with His Majesty the great work that our learners and staff are doing. Rosie worked to produce such an amazing gift for The King and, when His Majesty received the gift, His eyes lit up. Learners such as Rosie, who seize the opportunities available at the college, reaffirm the value of delivering high quality, industry focused technical education,'





# Geography

We are pleased to report the Ofsted geography research visit went well. This research will include visiting 50 schools across the country from primary to secondary to sixth form. Five inspectors will visit ten schools each and report back and collate their research into a final report. Our feedback was incredibly positive! **"Really impressive", "Heartwarming", "Something Special"** were just a few of the words used to describe our humanities provision. It was also noted that our employer links with Balfour Beatty and The Office for National Statistics, where learners got to meet and hear from real geographers, came in for some special praise.



Our Humanities teacher Sabrin shared how she had developed the curriculum content using the college's curriculum plan model, the learners' books, hands-on learning from LEGO, and the EE and ELP projects. The Inspector was very impressed with this approach, stating that **"the learners have secured such high interdisciplinary skills which was very special and unlike anything he has seen to date [and that] the curriculum planning was very strong indeed."** The ofsted Inspector said **"if we could clone Sabrin, we could put her in every geography department in the country, making geography great throughout the UK"** 

Thanks to Sabrin for representing the college to such a high standard. Sabrin's great work demonstrates how all of our hard work is now paying dividends, that the employer engagement is shining through and that LDE is a truly great place, where our learners receive the very best as a result of all the hard work our staff put in.

# **Apprenticeships**

We are delighted that Ofsted has recognised the positive improvement made in every theme judged from our previous Inspection on the 25<sup>th</sup> and 26<sup>th</sup> January!

The report positively acknowledges the impact of leaders and managers ensuring that learners get the best out their time at LDE,



'Apprentices say that they feel better supported since the previous inspection, both at work and by the college [and that] Teachers use a variety of strategies to support apprentices to achieve high grades.'

These are just some of the many glowing and refreshing comments received, in which we are incredibly proud of. Our achievements and accomplishments are being realised and this gives us the renewed confidence and ambition to grow during this next phase of the apprenticeship journey. Thank you to our apprentices, colleagues and employers.

# Football has come to LDE!

















# The Bett Show- Partnering with Promethean

Our learners were invited to showcase their amazing digital work on the Promethean stand at the Bett show. With over 30,000 attendees, 123+ countries represented and 600+ innovative EdTech companies exhibiting their latest innovations, the Bett show is truly the global community for education technology.

On the Promethean stand, our Assistant Principal and Digital trailblazer James worked with our learners to showcase some of the programs used on the Digital Media and Computer Science course. Learners used the Promethean Activpanel to showcase the work they have done using Unreal Engine, Sketch Fab, coding in game design and many more programs.



James and our learners showcased the importance of digital access in education as audience members were visibly amazed by the work our learners had produced. James also discussed the incorporation of AI into the classrooms and the impact of Employer Led Projects in motivating our learners to excel with the skills taught on the curriculum.

Through this talk, learners not only exemplified the importance of digital employer led learning but also gained networking opportunities and engaged in meaningful conversations. Thanks to Promethean who have been a continued supporter of our college and our employer led learning experience. It was a privilege to work with you at the Bett show!



At first I was nervous to present, but then I recalled all my experiences throughout my Employer Led Projects and the times I had to present to them, and I felt more confident. I spoke about the game project I did in Computer Science, and naturally the words flew from my mouth, I felt really proud to present and had the opportunity to talk to interesting people from various backgrounds, for example a lady from intel came and talked to us about her experience in the 3D gaming world. It was very interesting to hear from different people and share my work!' Ibrahim, year 12 learner.



# **Key Dates in Summer Term**



8<sup>th</sup> May- King's Coronation Bank Holiday

16<sup>th</sup> May- Formal exams begin

26<sup>th</sup> June- EDI Gold Award celebration

4<sup>th</sup> July- Year 9 - 13 parents evening event: Apprenticeships vs University

8<sup>th</sup> July- London Festival of Design & Engineering (LDE open day)

W/B 10<sup>th</sup> July- Year 12 two week work experience

W/B 17<sup>th</sup> July- Year 10 work experience

# **Final Thoughts**

This newsletter shares just a glimpse of all the amazing work we have done across the college. To read about all our event please visit the <u>news area</u> on our website. These two terms have been full of excitement across our different faculties. We have enjoyed recognition from Ofsted for the hard work and dedication shown by our staff as well as glowing feedback from employers who have invested into our learners' journey.

As a UTC, we continue to work hard to provide an employer led blended learning experience so that our learners are prepared for industry once they move onto to the next stage in their education or career. Thank you to staff for their continued commitment, employers for their involvement delivering in а curriculum that reflects industry and finally our learners for grasping the importance of the opportunities in front of them and taking full advantage. Together, with all our efforts, we have created a truly amazing learning environment.

