



Impact Report 2022

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Introduction

Bring It On made a successful return to a live in person exhibition this year after 2 years of virtual events. We continued in our mission to Educate, Inspire and Inform young people in the North East and Tees Valley about engineering in their region.

We welcomed 1518 students from 91 schools across two days to meet with 49 exhibitors. We also used social media to engage with those students who we couldn't accommodate on the day.

This year we continued to innovate by trying out new ideas this year together with the core exhibition, and we introduced a Net Zero zone to our existing thematic grouping of exhibitors. We also brought along the most successful aspects of the virtual exhibitions by continuing to live stream the event onto YouTube and record short form video interviews with exhibitors, a resource to be accessed by schools after the event.

The feedback we received about the success of the exhibition has been amazing and we look forward to continuing to work with our supporters, exhibitors, schools, local authorities and other stakeholders next year to continue the success of Bring It On in the North East and the Tees Valley



Our Vision

To inspire young people to pursue a career in engineering and lift their ambitions and awareness of the world of work, showcasing the breadth and depth of well paid engineering career opportunities on their doorstep.

We welcome all engineering companies with a physical presence in the North East and the Tees Valley, and all schools and home-educators on a first come first served basis with per-school attendance limited to ensure the maximum number of schools have an opportunity to attend.



All of this is provided free of charge to both exhibitors and schools, we are a non-profit making charity and a limited company, we are financed entirely by our supporters who believe in our vision.

Why We Exist

There has, for a number of years, been a recognised shortage in the number of University entrants to engineering, causing a massive shortage of Engineers in the UK. At the same time demand for engineering skills continues to grow, for the UK to achieve its industrial strategies and Net Zero ambitions it requires a huge number of engineers.

- Each year since 2003 only 5% of University entrants are choosing engineering
- It is estimated that by 2030 the UK will need 1.3 Million engineers to deliver Net Zero and other industrial strategies. – A massive choice of well paid employment in a variety of subjects.
- Every year the UK accrues a shortage of 60,000 new engineers needed to meet these needs.

We exist therefore to raise aspirations of local young people and encourage them to take up a career in engineering.



The current engineering workforce also has a significant under-representation of women. Under representation exists in higher and further education subjects that feed into the engineering profession. Making the profession more attractive to women must begin not in the adult workforce but in schools before GCSE and A Level subject choices are being made as by the time women have reached working age they may lack the appropriate qualifications to enter the profession without first

returning to education. Historically a very high proportion of students visiting Bring It On are female, usually close to 50%

When it comes to addressing the underrepresentation of both women and minority ethnic groups and those with declared disabilities we need to show that everyone can be an engineer. By inviting real engineers from the local area to exhibit we hope that all students will be able to see that

“someone like them” is an engineer and that the profession is inclusive and not just for “other people”. Giving them the time, space and opportunity to talk with engineers about their backgrounds and experience is an effective way to deliver on this objective and raise the aspirations of young people.



Our Achievements

This was our sixth successful year, running since 2017, with a virtual event during 2020 and 2021, we returned this year to Sunderland for the 4th time. We hosted 1518 Students and 49 Exhibitors.

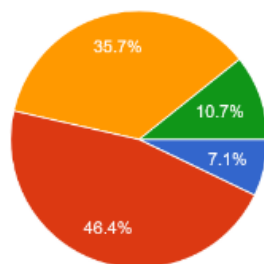
We were particularly pleased that, despite the COVID-19 interruption, we were able to renew links with schools, exhibitors and supporters and hold an event which meets the high standard set by our last in-person exhibition.

After the event we issued questionnaires to understand the effect BIO has on students and teachers, we asked Teachers for subjective opinion on their own knowledge of engineering opportunities in the area, and their student’s awareness of opportunities. The results show that we have significantly improved awareness through attendance, particularly pleasing is that we are reaching students and teachers with no prior knowledge at all, and ensuring all leave with at least an awareness of engineering.

Before attending 64% of schools report class groups with no prior knowledge of engineering, after the event 46% report students being able to describe at least 1 engineering employment opportunity, and the next 46% report students having an awareness of job opportunities.

How would you rate your own knowledge of the engineering opportunities in the North East before attending BIO?

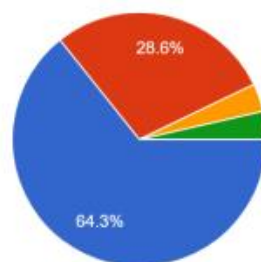
28 responses



- 1. No knowledge
- 2. Awareness of 1 or 2 companies
- 3. Aware of a few companies and the types of job they offer
- 4. Aware of many companies and wide variety of job roles

How would you rate the awareness your students had of engineering opportunities in the North East before attending BIO?

28 responses



- 1. Majority had no knowledge
- 2. Some students had an awareness
- 3. Many students had an awareness
- 4. Students can describe at least 1 engineering employment opportunity
- 5. Students have detailed knowledge of several engineering employment opportunities

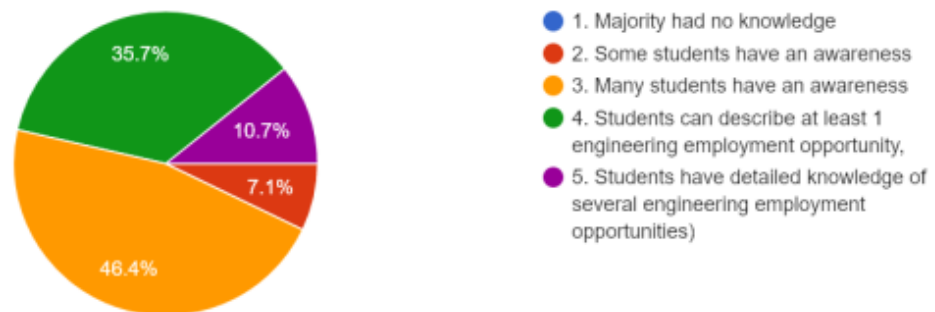
How has this changed as a result of attending BIO?

28 responses



How would you rate awareness after attending?

28 responses



Teachers are also reporting that their own knowledge has significantly increased, with 17% feeling able to talk confidently to students about companies and jobs in their area after attending Bring It On.

We were also able to roll forward our virtual event experience into this year's physical event by conducting live streaming of the event and collecting short interview segments for later publication on YouTube. Production of this video content was part of the curriculum at Stockton Riverside College and a valuable part of the learning experience for students on that course and we are delighted to add that capability to Bring It On.

"Thank you again for getting the students involved in filming the event. They had a fantastic time and gained a huge amount of learning from the experience."

- Kane Smith, Lecturer Stockton Riverside College

Our Innovations

Every year the Bring it On organisers try out new innovations to the core event offering and evaluate performance for inclusion in future years. This year we tried out the following:

Road To Net Zero

Climate change represents the biggest challenge for the next generation of engineers and the North East and the Tees Valley has many local businesses operating in this area, whether it be moving their businesses from high to low carbon intensity or being one of the many climate positive businesses (e.g. offshore wind sector) that have moved to the area to complete decades long projects and are making long term generational investments into our local community. We felt it was imperative to give a dedicated zone to these businesses alongside the pre-existing thematic zones that we have.



We have also looked to ourselves to measure and reduce our own impact on the climate, where possible we have re-used banners and signage from past events. Digital signage was utilised for display items that cannot be re-used from year to year. Where we did have to print new banners and signage this was done using sustainable and re-usable materials. To minimise travel we have used virtual meetings to organise Bring It On and communicate with our event partners, we have found these to be effective and time efficient and will be continuing with this format

The introduction of the Net Zero zone to the exhibition was broadly successful, we had suitable exhibitors able to attend and student engagement was good. Looking to the future it would be excellent if we could attract more climate positive engineering businesses that have not previously attended Bring It On to exhibit in the Net Zero zone and provide an opportunity for exhibitors to talk about their own routes from high to low carbon

Engagement with Parents

Our engagement level with schools across the region has always been very good, but schools only represent part of the learning journey for Children, the involvement of parents being critical to their learning and career choices. Due to the format of Bring It On our opportunities to engage directly with parents have been limited and much of what we do is outside of their view.

This year we asked schools to invite parents and school Governors to Bring It On with their students and we offered a private lunchtime session where we could present information about Bring It On and listen to parents views and feedback.

Unfortunately this event was unsuccessful as parents did not attend the lunchtime session so we were unable to gain their feedback. We do know that parents attended Bring It On this year as a result of our invitation so they will have benefitted from exposure to exhibitors and also experienced what Bring It On offers children.

Our Founders and Steering Committee intend to look at alternative ways of engaging with parents which will be more successful in establishing communication and also taking Bring It On beyond the classroom and into the living room.

Inviting Final year engineering students (university and college)

Having so many local employers in one place is a great resource and we wanted to maximise the benefits by expanding attendance to final year engineering students who are starting to look at employment options after education. We also know that local engineering companies experience a lot of competition in recruiting the best graduates so felt this opportunity would also bring direct benefit to their businesses.



We already have links with some local Universities and Colleges and invited them to send students to a special early evening session after the main primary school event finished, as this was a trial run invites were limited, but we were expecting 107 students and asked Exhibitors to stay on after the main event if they were able.

We received good support from our exhibitors 36 of whom were happy to stay for an extra hour. Unfortunately only 25 students turned up, it has been difficult to ascertain why attendance was so low. It is possible students didn't see sufficient value in attending, having already secured graduate placements with employers or found it difficult to arrange transportation to Sunderland. Feedback from one college was that because the activity was in the evening it was difficult to attract students, daytime attendance would have been better.

The Founders still feel this is an excellent opportunity for final year students, and as many exhibitors were happy to commit more of their valuable time, we would like to make best use of this. We are also mindful of offering opportunities back to our exhibitors where this is possible (for example the business networking opportunity Bring It On provides). We will be looking at ways to maximise attendance perhaps through overbooking, better communication to students and consideration to logistical challenges like transport or encouragement to attend. Any future events will also occur earlier in the day to minimise the time commitment from our exhibitors, this year we placed a gap between the daytime event and the final year student event which in reality was not necessary.



Bring It On 2022 in Numbers

This was our sixth successful year, running since 2017 with a virtual event during 2020 and 2021 we returned this year to the Beacon of Light for the 3rd time. Our first exhibition, in 2017, was in the adjacent Stadium of Light.

Students

Over the course of 2 days we inspired 931 Primary school students and 587 Secondary school students from all



parts of the Region. To ensure we reach as many schools as possible we do have to limit per school attendance, which this year allowed us to invite 57 Primary and 34 Secondary schools and their teachers. 25% of the invited Primary students and 20% of the invited secondary students were unable to attend on the day. This year 107 college students were invited and 25 attended.



Given the 22% drop out rate this year we will be considering overbooking the event next year to ensure the opportunity is available to as many students as possible, and looking at the reasons for drop out to see if we can address those. We will also be taking on board the feedback regards college students before deciding how to approach that next year.

Exhibitors

This year we welcomed 49 engineering companies from across the Region, who brought the tools of their trade to give hands on experience of what being an engineer involves. We had 75 registrations this year, the main reason for drop out given by the 26 who could not attend was staffing or resource shortages, but all drop outs were keen to be involved in future years. We have also had some companies not registered for this year who are keen to attend next year. Therefore we are confident that exhibitor support next year will be even stronger.

We had 6 zones for exhibitors representing their engineering specialism, the breakdown was:

- Automotive, Rail and Aerospace - 12
 - Chemical, Processing and Biotechnology - 4
 - Civil, Structural and Construction - 14
 - Creative, Digital Technology - 6
 - Subsea, Oil & Gas, Renewables and Energy - 9
 - NetZero - 4
- A full interactive map of all exhibitors can be found online, including video interviews with each exhibitor:



<https://earth.google.com/web/@54.73494806,-1.50847426,112.73803216a,152759.84072205d,30y,0h,0t,0r/data=MikKJwolCiExc1BsRFILMVJXUmhBVkJPX3BlZXZRa0JsbXdJWUVBeGogAToDCgEw?authuser=0>



Local Authorities

We are proud to work with all local authorities in the region ensuring representation all across our target area.

Schools by Local Authority (Ex Home Educators)						
	Primary		Secondary		Total	
	Registered	Attended	Registered	Attended	Registered	Attended
Cumbria	0	0	1	1	1	1
Darlington	1	1	0	0	1	1
Durham	9	6	7	7	16	13
Gateshead	3	3	1	1	4	4
Hartlepool	0	0	2	2	2	2
Middlesbrough	7	5	3	2	10	7
Newcastle	11	9	3	3	14	12
North Tyneside	4	4	2	2	6	6
North Yorkshire	2	1	1	0	3	1
Northumberland	4	3	4	4	8	7
Redcar and Cleveland	2	1	0	0	2	1
South Tyneside	4	4	3	3	7	7
Stockton	12	11	5	5	17	16
Sunderland	12	9	6	4	18	13
Total	71	57	38	34	109	91

Social Media Engagement

In common with other events and charitable organisations Bring It On makes effective use of social media channels, picking those most used by our stakeholders. This year we actively engaged in **Facebook** where many Schools are active, on **LinkedIn** where our exhibitors are active and on

Twitter where members of all stakeholder groups can be found. We also used **Youtube** as a communication channel for video material produced at the event, the advantage of YouTube is it is a more enduring store of information and something that schools can dip into for educational resources at any time, we have developed a range of short form interview snippets ideal for in classroom use.



We used social media to raise awareness of Bring It On and to encourage participation by schools and exhibitors. During the event social media was used to communicate a flavour of the event, and participants used it to document and celebrate their own involvement. This was the first year where we have maintained an active and deliberate presence on LinkedIn, although it has for a number of years been a communication and networking resource for the organisers and exhibitors.

We track social media engagement to understand what information does and doesn't work well and are pleased with the reach that we achieved this year:

- Our own content had 12.5K views generated from Twitter in the month of the event with 7.7k views on event days, A 46% increase on 2021. Of these views 4.2% were engaged with (clicks, retweets etc)
- Content on all social media platforms from attendees amplified our reach and had significantly more impressions than just our own posts.
- Our most popular Facebook post during the event:



- Schools concentrated their posting efforts on Twitter, we were able to highlight their experiences of the event by quote tweeting and interacting with the posts. We also did the same with Exhibitors:



All of our own social media output and related content from our stakeholders can be viewed on the mentioned social media platforms by searching for:

- Twitter: @BringItOnNE #BRINGITONNE
<https://twitter.com/BringItOnNE>
- LinkedIn: <https://www.linkedin.com/company/bring-it-on-north-east/>
- Facebook: <https://www.facebook.com/BringitOnNE/>
- YouTube:
 - @bringitonne6417 (virtual events 2020 & 2021)
 - Primary Day Live Stream recording https://youtu.be/i_K2tcFaJxE
 - Secondary Day Live Stream recording https://youtu.be/95QH_c50spU
 - Links to interview snippets with Exhibitors:
<https://earth.google.com/web/@54.73494807,-1.50847425,77.96396514a,213525.74567389d,30y,0h,0t,0r/data=MikKJwolCiExc1BsRfILMVJXUmhBVkJPX3BlZXZRa0JsbXdJWUVBeGogAToDCgEw?authuser=0>
- Our Website: <https://bringitonne.co.uk>



We will continue to make use of social media as it is a powerful tool to spread the word about Bring It On and allow attendees to document their experiences which further raises awareness not just of Bring It On but also our mission to enthuse young people about the opportunities in Engineering. The trial of LinkedIn went well and we will continue use of this platform.

What Teachers and Students Say

Teachers can be an excellent judge of the short and long term impact on their students, education of teachers is also an important part of our mission, this is a selection of feedback from them:

- A rich, memorable experience that the children will talk about for a long time. Hearing 'I could do that' was testament to the success of the event. Thank you!
- The students were engaged and enthusiastic. It allowed them an opportunity to speak to people who work in different engineering-based industries, which is very difficult to achieve in a school setting. I was particularly pleased that in a mixed-gender group, it was the girls who queued up to try the digger. The range of activities and businesses represented was also excellent.
- Thank you again! I went home on a bus, full of very happy students. Today, I have received messages from parents on how much their child enjoyed the event. It's a great way to inspire the students to carry on either with A level STEM subjects or begin an apprenticeship. Well organised, well run and a fun event to be involved with.
- We enjoyed the event, it was our second visit.
- It would be great to have had some live workshops running alongside the careers fair stands, where everyone or groups could gather to take a look at a piece of technology/discuss a relevant idea. We felt this would be a good way of having all students to receive some information in a more exciting and dynamic way i.e. have a workshop just for the robot dog, to understand the engineering involved and show it off etc. the same could be done with multiple items/ideas.
- [Improvements:] If each company had a standard info sheet. Grades needed, what apprenticeship they have, detail of websites etc.
- Fantastic event, children loved it. Thank you for having us!

Many schools were also active on social media this is what they have to say about Bring It On:

"Great day at @BringItOnNE our kids had an amazing day meeting lots of companies and having their eyes opened to all different types of engineering. Quote of the day - "I definitely want to be an engineer after today!"

- Hasting Hill School - Mr Jones - Year 6 - @MrJonesHHA

"Y7-9 students visited @BringItOnNE for hands-on #engineering experiences:

- Automotive, Rail & Aerospace
 - Creative & Digital Technology
 - Civil, Structural & Construction
 - Subsea, Oil, Gas, Renewables & Energy
 - Chemicals & Processing
 - The Road to Net Zero
- #CEIAG #Careers"*

- Whickham School - @WhickhamSchool

A fantastic morning so far @BringItOnNE We have been very busy using VR headsets, operating machinery, learning about electrical engineering, logistics and renewable energy! Roll on this afternoon's session!

**- West Jesmond Primary
@West_Jes_School**

What an inspiring & interesting day of all things STEM! From mechanical engineering to chemical, civil engineering to automotive, digital engineering to sustainability...our children left buzzing about future careers in STEM right here in the North East! #STEM #BRINGITONNE

**- Fulwell Junior School
@FulwellSchool**

What Exhibitors Say

We received direct feedback from exhibitors on their event experience including learning points we can roll into the exhibition next year.



I would just like to say our team thoroughly enjoyed the couple of days, the only downside was the small turn out for the Late session on the first day

- Nexus

It was a fun (& tiring) two days, lots of interest and learnings from our side. Teachers have my full respect.

- Sofia Offshore Wind Farm

The event was as popular as ever and it was nice to engage with enthusiastic children asking lots of questions.

Well done to the team behind the scenes and on the day.

I thought that Bring it On was an astonishingly successful exercise in bringing the region's leading engineering companies into the same space as eager young people, inquisitive to learn about the opportunities that engineering has to offer.

What struck me was the sheer enthusiasm of the thousands of young people; the atmosphere was literally buzzing, and the willingness of engineering professionals in world class companies to give up their time to inspire the next generation, and provide an insight into the opportunities of a career in engineering.

I haven't seen anything quite like this before, and I only hope that Bring it On will be around for many years to come, inspiring young minds in the North East to be part of the region's exciting engineering future.

- IChemE

British Engines loved attending and have since had interest from students and schools to ask about engineering placements and opportunities for work experience.

- British Engines



Thanks for having us, it was a great experience for our team of apprentices.

- EDF



Thank you very much for putting the event on. We thoroughly enjoyed the two days, and it was great to interact with our future engineers first hand.

Suggestion: Add a central stage element to the event where exhibitors and others can present during certain times of the day, such as during lunch.

- AmbaSat Ltd

The event was well organised with plenty of time for exhibitors to set up and the venue was well laid out.

The size of the groups of students was ideal as this allowed us to interact with all of the students within the groups. The students and the teachers were obviously interested in Engineering which was great to see.

The event covered a huge breadth of Engineering and reminded me of how much Engineering heritage there is in the North East.

I watched the live stream of the event afterwards and thought it was good – there were a number of great themes covered such as ‘not for women, climate change, Britain doesn’t make anything and it’s a dirty job’ – perhaps providing these themes to the Exhibitors before the event would allow us address them through our interaction.

The event was hugely successful both for us as a company and as an event for inspiring future engineers.

Students over both days from KS2 & KS3 were actively engaged in what our organisation had to offer over the course of the 2 days. With all the impressive technology and product that we demonstrated from manufactured product, an interactive 3D mouse, 3D laser scanning and augmented reality it seemed that the simplest of tasks impressed the students most! Darchem Engineering paper aeroplanes!

I was very impressed with the level of engagement of the students but also the educators who were alongside them with key discussions about how to get young people interested in the field actually into employment.

- Darchem Engineering Ltd



Our exhibitors love to talk about their experiences on social media, their knowledge is valuable and the tools of their trade capture the imagination of Students:

Enjoying being with @RWE_UK colleagues @BringItOnNE today showing 100s of North East primary pupils the opportunities in the offshore wind sector and #STEM skills needed. @ukstemdotuk @TeesCareers

- OASES - @OASES_NorthEast

#BringItOnNE Day 2: Excellent to see so many female students considering a career in #STEM and especially these students from @NewcastleHigh! Thanks again to @BringItOnNE for their superb support.

- AmbaSat - @ambasat2

How busy is our stand at the @BringItOnNE festival!

We promise that Lauren and Joe are in amongst all the children showing them how to be STEM superstars!!

- hospiping - @hospiping

A busy day for our Sofia Offshore Wind Farm team, appearing at @BringItOnNE, The North East Exhibition for Future Engineers 🤖🔧🔧🔧

In addition to inspiring the next generation of engineers, the team also welcomed The Mayor of Sunderland, Alison Smith to the stand.

- RWE UK - @RWE_UK



Our Supporters

Bring It On is proud to have developed a wide supporter base of individuals, charitable foundations, local authorities and businesses who believe in our Vision to improve the prospects of young people in the North East and the Tees Valley. As a charity with no employees all of the contributions we receive go directly to organising Bring It On every year and we are proud to offer a comprehensive event on a very efficient budget.

By having a broad base of supporters we remain independent of the views of any one donor and secure ourselves against the financial risk of supporters dropping out in harder economic times. Our policy has been to pursue many small donors rather than a select few large donors, as we believe this best protects Bring It On in the long term.

The continued success of Bring It On has come from retaining the financial commitment of our supporters year after year who share our vision and see the unique offering that Bring It On provides

Our Headline Supporters



And



Feedback from Our Special Guests:

"I thought that Bring it On was an astonishingly successful exercise in bringing the region's leading engineering companies into the same space as eager young people, inquisitive to learn about the opportunities that engineering has to offer.

"What struck me was the sheer enthusiasm of the thousands of young people; the atmosphere was literally buzzing, and the willingness of engineering professionals in world class companies to give up their time to inspire the next generation, and provide an insight into the opportunities of a career in engineering.

"I haven't seen anything quite like this before, and I only hope that Bring it On will be around for many years to come, inspiring young minds in the North East to be part of the region's exciting engineering future."

- Denis Healy, Business Development Manager – The Institution Of Mechanical Engineers

"Bring It On is a great event to help inspire, educate, and inform children in our city about career opportunities within engineering across the Northeast. My Consort and I very much enjoyed attending the 6th annual Bring It On event in Sunderland where we were given a tour of the venue and were able to meet and chat with the Primary School children in attendance . We also took the opportunity to sample some of the creations the engineering companies and professional engineering institutions had on display which was simply fascinating. I hope this event continues for many years to come and helps to educate and inspire our young people into becoming our cities future engineers"

- Mayor of Sunderland, Councillor Alison Smith and her Consort David Smith



"Walking around I found that exhibitors were engaged with the students, with them often asking questions about the companies' products.

Overall, it appeared to be successful and I cannot personally think of anything that can be improved other than hopefully attracting even more companies to future events."

- Ian Mearns BSc, MSc, CEng, FIMechE

"The noise was deafening! A great buzz resonated throughout the venue. It was exciting and immediately drew me in!

As I looked over the balcony into the huge space packed with regional businesses and our professional engineering institutions, pupils were energised, interested and actively engaged with hands on engineering activities. Queues lined the courtyard for the opportunity to sit in and learn about huge construction equipment such as the Komatsu excavator. Pupils were engaged, learning and having fun!

I was struck by how diversity and inclusion were embedded throughout from physical access through to job roles and levels of engineering to 'I can see myself' in the engineers representing businesses. This was mirrored by pupils' participation and engagement in the activities. It was exemplary. There was a genuine feeling of collaboration, shared sense of purpose for all and for a bigger good than any individual organisation.

The event provides pupils with one of a number of contacts with engineering they have in their learning journey. It was clear to me through my conversations with organisers, businesses, Engineering UK and key stakeholders that they valued this event and recognised its importance to education, businesses and the economy. But even more striking, was the passion and shared commitment that came through for engineering in this region and its embeddedness into its DNA.

I am left in no doubt of the huge positive impact that this collaborative engineering event will have had on pupils, teachers and our profession. It is a credit to those organising, funding and supporting the event and long may it continue. It provides a model of exemplary practice, aspects of which has transferability to other regions."

- Professor Helen James OBE, FIMechE, Chair Education and Skills Strategy Board, IMechE



It was wonderful to see the return of the Bring it on event in person, the Deputy Consort and I were extremely impressed with the level of technology on display. We really enjoyed learning about what future opportunities are available in the engineering industry for our young people and hope some of the Secondary School children that we met were inspired by this event as much as we were. My Consort I very much hope to return to this event next year

- Deputy Mayor of Sunderland, Cllr Dorothy Trueman and her Consort Cllr Harry Trueman