



# **IMPACT REPORT**

**2020/2021**

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*Connecting  
young people with  
industry and  
inspiring STEM futures*

# WELCOME

*Encouraging young people to pursue their passions and achieve.*



## Chief Executive Officer

*Julie Feest*

EDT has been through substantial change this past year, however we continue to be a forward-thinking inclusive charity enabling young people to have their best chance in life. This year has been a pivotal time for young people, whose futures are still under threat from the effects of the pandemic, but who equally have access to exciting potential careers in growth industries such as Environmental Sustainability, Health, Cyber and AI. EDT has responded flexibly to their needs with a hybrid model of virtual and in-person engagement methods.

We would like to thank our students, teachers and funders, who continue to work closely with us to achieve our vision of a society where all young people have the tools they need to create their best future.

## Our Vision

*We are working towards a vision of a society where young people have equal access to engage with STEM subjects and achieve their potential in further study and careers.*

## Chair of the Board

*Professor Elena Rodriguez-Falcon*

It is truly a great honour to be joining EDT as the Chair of its Board of Trustees. EDT brings industry and educators together, helping young people to build the knowledge, skills and connections they need to thrive in STEM workplaces and build a better future for all of us. It's a mission that I wholeheartedly support. In particular, I look forward to working with stakeholders and loyal supporters of EDT to deliver on our purpose and maximise impact with the young people who need us most.



# OUR IMPACT

## INSPIRING YOUNG PEOPLE

In collaboration with employers and partners, we have delivered impact for young people and schools across the UK.

Over  
**50,000**  
Experiences

**99%**

rated their overall Industrial Cadets experience as good, very good, excellent

"It has been an experience of a life time. I now know what I want to do."  
Industrial Cadets student

"Honestly, the depth in which they went into about the various sectors was incredibly fascinating, it is clear this was so well considered and tailored to us!  
I definitely feel so much more enlightened, and I can imagine everyone else did too."  
Industrial Cadets student



**98%**

of students said their skills and knowledge improved as a result of their Industrial Cadets experience

**Improving skills and knowledge**



**96%**

of students said they know more about STEM career opportunities available to them as a result of their Industrial Cadets experience

**Learning about STEM careers**



**88%**

of students are likely to choose a future STEM career, related to their Industrial Cadets experience

**Inspiring STEM career choices**



# OUR IMPACT

## DIVERSITY & INCLUSION

Young people are at the heart of all we do. We value diversity and strive to offer equal access and inclusive opportunities for all young people.

Black, Asian and Minority Ethnic (BAME) representation in the UK is approximately 13%.

**38%**

of our students were BAME, increasing from 29% last year.

"[My ambitions were] just to pass exams but I didn't really know what I wanted to do. [EDT] was THE deciding factor in my decision."  
Industrial Cadet Alumna & Engineering Graduate

"Something that has been helpful for me is also the diversity of who we saw through this experience, it made me happy to see people who are like me being in STEM" Industrial Cadet Silver Student

- Majority of Industrial Cadets Challenger students are from schools with above average Free Schools Meals\*
- Reaching students living in disadvantaged areas
- Engaging with students with caring responsibilities
- Working with a variety of alternative education providers including pupil referral units and special educational needs schools

35% of STEM students in UK higher education are women, and the STEM workforce is 24% female (STEM Women, 2021)

**47%**

of young people taking part in EDT activity at age 16+ were female

"Thank you for working with us and our young people! Our pupils had a great time... and I was able to see my group grow in confidence throughout the project. I believe they developed their confidence in both their interpersonal skills and understanding of industry and sustainability." - Teacher, Educational Diversity, Alternative provision school

\*where Free School Meals data has been made available

# LISTENING TO OUR STAKEHOLDERS

Through connecting with our stakeholders, holding regular focus groups and conducting research, we were able to understand their challenges and needs.

**61%**

of employers have cancelled work experience, internships, placements due to COVID-19 (YouGov, 2020)

"Disruption in the labour market could see many young people unemployed with the effects lasting for years to come. Recovery plans should focus on investing in the younger generation."  
-SDS 2020.

The attainment gap between the most and least disadvantaged young people has widened by

**25%**

since the pandemic (EEF, 2021)

**59%**

of young people feel they need more workplace skills (Macquarie Youth Index, 2018)

Over 30% of parents are worried about giving "wrong" careers advice, and

**50%**

don't have a clear understanding of future careers (Ernst & Young, 2017)

**54%**

of young people feel held back by a lack of self-confidence (Prince's Trust, 2018)

The content in all our activities is curriculum-aligned, informed by feedback from young people and teachers and emphasises core maths and English skills.

# OUR APPROACH

*Working closely with our stakeholders, we adapted and became more agile to continue supporting young people during a time of uncertainty.*

"Very well run, especially as it was virtual, and talks with people in the business were very well set up and executed."  
Industrial Cadets student

"I would love for all employers, from all sectors, to provide these life-changing opportunities to young people - you have no idea how far these encounters go in empowering young people, especially those from disadvantaged backgrounds."  
- Teacher, Woodside High School,

*EDT offers new and unique ways to engage with young people through a hybrid model of learning.*

Free online resources, removing geographical barriers to participation

Offering multiple methods of engagement including via our new Online Learning Management system

Virtual STE(A)M courses that are still focused on developing important employability skills like resilience and teamwork

Many thanks indeed for providing an excellent course at a difficult time - really grateful to EDT for (as usual) going the extra mile! -Parent

Working with employer partners to involve a more diverse range of mentors in our activities, ensuring that young people of all backgrounds can "see themselves" in STEM.

Theme/sector-focused experiences which reflect areas of economic growth and also the concerns and interests of young people (i.e. environmental sustainability and emerging digital technologies, etc.)

# EXPERIENCES & PATHWAYS

*Strengthening pathways to employment for young people through our industry-led quality benchmark for education outreach programmes and experiences.*

Promoting the development of the next generation of UK's young minds, Industrial Cadets is a kite mark for schools and students seeking valuable and exciting STEM opportunities. In collaboration with partners nationwide, we are creating multiple engagement opportunities for young people who need support now more than ever. Students build Industrial Cadets portfolios to showcase experiences and acquired skills, celebrating progression and fostering a sense of achievement.

Industrial Cadets creates;

- networks of Industrial Cadets schools and local hubs of activity
- diverse, socially mobile communities of experienced and skilled young people
- clear progression routes for students, encouraging multiple interactions.



 Industrial Cadets

## Partner Accredited Programmes

Partners can work with Industrial Cadets and use the skills and competency framework to accredit their own education and outreach programmes. The quality assurance moderation provides accredited status for partners and recognition awards for young people.

## EDT Experiences

**Ages 7-18**

EDT experiences (previously known as First Edition, Routes into STEM, Headstart and Inspire) show young people how STEM is relevant, interesting, and can lead to a range of rewarding careers. Through EDT experiences including Virtual Routes Into STEM, Insight into University, Virtual Work Experience, young people work on hands-on challenges and interact with STEM professionals and educators.

## EDT Projects

**Ages 13-17**

EDT Industrial Cadets Gold and Bronze projects (previously known as Engineering Education Scheme (EES) and Go4SET) engage young people in real-life STEM challenges, mentored by industry professionals. Students develop their skills and gain a better understanding of STEM. They develop core employability skills including project management, communication, team-working, time management, presentation, report writing and more.

## EDT Placements

**Ages 17 plus**

Year in Industry placements are for post A-Level/ Higher/ Advanced Higher or equivalent school leavers and undergraduate students looking for professional development within the STEM industry. Students complete a 10 to 12-month paid work placement opportunity within their intended career sector. Placements are available for all areas of STEM as well as business and finance.

Offering bespoke and tailored programmes for partners



# HIGHLIGHTS

Reaching more young people and creating unique virtual opportunities.

## VIRTUAL ROUTES INTO STEM

Virtual Routes into STEM for 13 to 15-year-olds ran four times throughout the academic year of 2020/2021. Over 1000 motivated students broadened their knowledge of the pathways available to them after partaking in their GCSEs, showcasing future career opportunities and giving them the opportunity to interact with academics, students and industry professionals. We had amazing contributions from over 25 partners including colleges, universities and STEM companies. Using EDT's learning management system to facilitate this on-line learning, we transformed a three-day face-to-face to a three-week-long on-line experience.



over  
**1000**  
students!

## PLACEMENT STUDENTS MAKING AN IMPACT

Through our Year in Industry scheme and Industrial Cadets Platinum accredited placements, students were able to have an immersive and impactful work placement, despite the challenging circumstances faced.

98% of Placement students said their placement has positively influenced their future study or career plans.

"This experience has honestly changed my future and springboarded my career plans further than I could ever have imagined. The past year has helped me to decide on a career path and set me up for my future with many opportunities to develop my personal skills as well as learning how to thrive in a professional environment. Without this EDT placement, my future would not look nearly as exciting and positive as it does"- Student



**62**  
companies

**369**  
Industrial  
Work  
Placements

## INDUSTRIAL CADETS WEEK GOES VIRTUAL

Industrial Cadets Week took place from 23 to 27 November 2020 and gave students a sneak peak into the exciting world of work and unique access to established professionals and emerging young talent across a wide range of sectors. The live sessions gave young people the opportunity to ask the panel of employers questions that will help and support them in making future decisions about their careers.

Following Industrial Cadets Week, we developed a resource pack that was sent to teachers across the UK, giving them complete and easy access to all the content from the week. The resource pack was shared even wider by the teachers who attended, meaning the number of young people reached as a result of Industrial Cadets Week extended far beyond the week itself.



We directly engaged with  
**139**  
schools

The resource pack was sent to over  
**500**  
teachers

We reached circa  
**17,000**  
young people through the week itself and the supporting resource pack



# DELIVERING IMPACT FOR OUR SUPPORTERS

EDT designed and delivered bespoke programmes aligned to organisations' priorities.

## The Ogden Trust:

Over 450 pupils took part in "Insight Into... Physics" activity sessions, tailor-made to encourage under-represented young people into physics further study & careers.



making physics matter

**MAKE YOUR OWN 3D HOLOGRAM**

You will need:

- Plastic bottle
- Craft knife or scissors
- Clear tape
- Pen
- Ruler
- Smartphone

**SAFETY FIRST!**  
If you are using a craft knife always cut away from your body and keep your fingers clear of the blade!

**What to do:**

**STEP 1:** Using your craft knife or scissors, cut off the neck of the bottle just below the lid. Cut the rest of your bottle in half just below the label - throw away the bottom half of the bottle.

**STEP 2:** Flatten the bottle length-ways so it folds in

**90%**

of pupils said they knew more about real-life uses and jobs in physics.

"We want students to understand the opportunities that can come from studying physics and for them to see that physics can be for everyone. These physics-themed activity days [give] a real-life context to physics learning."  
- Clare Harvey, CEO of The Ogden Trust



## TECH WORK EXPERIENCE

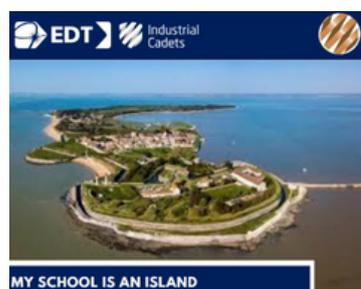
Over 200 students (most of whom already achieved their Industrial Cadets Bronze Level award through Routes into STEM) took part in our virtual Tech Work Experience, earning Industrial Cadets Silver Level awards. EDT were excited to collaborate with industry leaders including **Sky, Camwood, GE, Leidos, Profusion, Thales, Vodafone, FACT Liverpool, Collins Aerospace and Babcock.**

Students met industry experts, including EDT alumni, who provided a unique insight into the tech industry via live Q&As each day.

"The variety of technical and non-technical jobs has helped me broaden ideas of what I want to do in the future"  
Tech WEX Student

## The Cadent Foundation

Over 100 young people took part in environmentally-themed STEM projects



Pupils designed and built prototypes of climate change-resistant buildings, sustainable schools and environmentally friendly communities, supported by mentors from the renewable energy industry.

"I loved all the parts of research and discussion about sustainability and how communities such as our school, although on a small budget, can be so kind to our planet." - Pupil, The Urswick School



# THE VALUE OF PARTNERSHIPS

*Our mission is connecting young people with the world of work and we pride ourselves in building long term sustainable partnerships to achieve this.*

Our industry partners range from SMEs (small and medium-sized enterprises) to large global employers representing the broad spectrum of STEM careers. These partnerships enable us to deliver experiences for over 50,000 students per year and introduce all our young people to inspiring mentors and role models supporting them to make informed decisions about their future.



# INSPIRING VOLUNTEERS & FUNDRAISERS

**1177 VOLUNTEERS** (mentors, assessors, ambassadors)



## DONORS

Supporters like you **DOUBLED** our level of charitable donations from 2019/20!

DONATE



## FUNDRAISERS



[Click here to view our fundraising pack](#)



# THANK YOU!

*You help us give young people the tools they need to build bright STEM futures.*

*Find out how you  
can change a  
young person's  
life through STEM*



**Find out more about**

**EDT Hybrid programmes**

**Industrial Cadets**



**With your support,  
EDT will continue to:**

- Deliver thousands of curriculum-aligned, Industrial Cadets-accredited STEM experiences across the UK.
- Improve equality and diversity in STEM by engaging with under-represented and disadvantaged young people.
- Develop exciting STEM activities themed around growth industries and student interests.
- Support STEM industries across the UK to build a strong and resilient talent pipeline.



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