

Supporting the place-based GRADUATE EMPLOYMENT AGENDA



ANDREW MIZUMORI HIRST, Director of the White Rose Industrial Physics Academy (WRIPA), outlines how the pandemic altered their employer engagement approach, changing things for the better.

Connecting higher education providers with employers helps students to develop an expansive skill set and create experiences that prepare them for an ever-evolving world. Universities now face the challenge of supporting the career needs of students in a dynamic labour market where employer recruitment processes have changed, as well as the graduate attributes that employers value.

The White Rose Industrial Physics Academy (WRIPA) is a collaboration between businesses and university physics departments – in Hull, Leeds, Nottingham, Sheffield and York. Our mission is to provide physics students with the opportunity to gain skills and work experience that better prepares them for graduate-level work. In recent years, WRIPA has adapted to the changing nature of employer engagement, pivoting to working more with alumni businesses and curriculum development, resulting in an improved employer engagement model.

1. Co-creation of digital career planning tools

Students are increasingly interested to hear about businesses beyond their corporate messages (e.g. the organisation's ethics, work/life balance etc). The Physics Careers Case Studies Tool supports undergraduate physics students to make better-informed career choices. Based on physics alumni interviews, the tool enables users to access case studies based on search terms, including 'experience type' and 'region of work', as well as connecting with alumni via LinkedIn. This new tool is part of our digital career resources, used in employability workshops and credited professional skills modules. These tools were created in response to Covid to digitally connect our students to a broader range of (regional) employers.

2. Co-creation of curriculum content

The University of Sheffield physics department have integrated skills training, embedding employers and work-based learning across the physics degree from year 1 to year 4. These changes mean that all undergraduate physics students not only learn key graduate attributes (e.g. critical thinking, collaboration or resilience) but also reflect on how they fit into the world of work. This is backed-up by the opportunity to connect with local employers through compulsory modules. Students can also gain work-based learning through the physics year in industry programme or final year group industrial projects.

The University of Leeds physics team have set up a new third year optional 'Physics into Work' module which provides students with workplace exposure and an opportunity to self-evaluate the skills they learn, applying them to the real world. Students complete 30 hours with a work experience placement, a reflective exercise and receive an employer evaluation. In 2020/21, 11 students took this module. Based on the micro-placements, four students secured summer internships, two students secured part-time work and three students secured graduate-level work. In 2022/23, 25 students are registered for the module.

3. Hybrid physics tech fair

Since 2014, the WRIPA fair has been a huge opportunity for businesses to engage with a larger and more diverse talent pool of regional physicists drawn from eleven university physics departments from across the midlands and the north.

During Covid, both the 2020 and 2021 fairs were virtual. Across both years employer engagement remained strong, but there was a significant drop in student attendance to two-thirds of the pre-pandemic level. We ascribed this to several factors, including "digital fatigue" and a perceived less exciting event. The 2022 fair has evolved to become a hybrid event consisting of 'face-to-face' (e.g. employer exhibitor stands) and virtual (e.g. sector-specific panel discussions) elements.

A hybrid event enables us to address various business needs with big employers keen to retain digital engagement, while the lesser known (often local) employers prefer to meet students face-to-face. Approximately 45% of employers at the 2022 fair were regional.

4. Targeted initiatives to support students with a social communication / Autism Spectrum Disorder (ASD)

We know that not all students have the confidence to approach and work with employers, particularly those with social communication impairment. WRIPA now collaborates with diversity-friendly employers and supportive organisations, including Living Autism. They support students to build up the confidence to apply for roles, and to disclose their disability.

Embedding employers within the curriculum delivers an equitable approach to work opportunities, connecting with employers and gaining translational graduate attributes and skills.

While it was a huge challenge, Covid gave WRIPA the opportunity to work with employers in different ways to support an equitable approach to skills development and better-informed career choices. Now, we can support employers – and students – better than ever before.



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