*Case study: T Level Science industry placement at Kent Scientific Services*

*Motivation for offering a placement*

*For Kent Scientific Services, the importance of practical scientific skills couldn't be over-stated. They provide calibration, toxicology and analytical services and the skills needed to do this are very much in demand. Samantha Keller is Analytical Operations Manager, overseeing the team that tests food and products coming into the country using a multitude of scientific methods and instruments, and she's clear that young people with practical laboratory experience will make valuable additions to the future workforce.*

*With that in mind, Kent Scientific Services has supported a degree apprenticeship programme that ultimately yields graduates who have the hands-on practical experience and scientific skills that the company needs. And Samantha views T Level placements are a logical step in that progression:*

*"It can be a move on from T level straight into degree, you attend university 1 day at week, plus your degree is paid for through the apprenticeship scheme. You get the experience; you get the knowledge - we always say the practical experience is the best. If you've got that behind you, you have a better standing when you are looking for employment."*

*Setting up the placement*

*As part of Kent County Council, the company is committed to supporting young people. They have close links with MidKent College and worked with them to create a selection process that gave students an authentic recruitment experience:*

*"We treat them as potential employees basically. So, we'd have their C.V.s… . and then we'd invite them for an interview. Normally, we would go to Mid Kent college to interview and then we would invite them to come over to the lab, meet all the staff, have a look around, see if they get the feel of it, and then we go from there. If we're happy and they're happy, then we'll take them on for the T level student placement."*

*For Samantha, the scheduling of a follow-up visit after the initial interview is vital:*

*"It's just a general chat basically just to see how they fit in and do they feel comfortable. And obviously, if they've never been to where we are, then it's travelling… can they get to us, is it going to be accessible for them, seeing what the day-to-day activities would be just so they get a feel of what it's like - because a lot of time, the only lab they've ever been in is a is a college lab, and it's totally different to being in an industry lab,*

*"This is actually exactly what you do with a normal interview anyway. You know you wouldn't employ someone blind. You would interview them, see if they're going to fit in."*


*During the placement*

*A block placement arrangement is implemented for T Level students, who are often working on projects that will span over consecutive days. The students have a mentor who will go through the paperwork with them on a weekly basis, but they're supervised by the lab staff on a day-to-day basis. With over 150 different methods in use, that day-to-day experience is rich and varied. A structure was put in place to support students to work in different teams and to progress from basic methods to more advanced technical tasks, as Samantha explains:*

*"When they first start, they will normally begin off with the basics i.e. weighing balances or pipetting. So, they go through how to use a balance, how to calibrate a balance, how to do pipetting. They would then move on to classical bench methods, for example paper chromatography, and then once they've done a couple of weeks doing that, they're then moved on to more technical tasks. So that's instrumental methods which could be High Performance Liquid Chromatography (HPLC) or Gas Chromatography (GC). And then from there they'll then move on to the much more advanced instruments ie GCMS or LCMS "*

*With so many opportunities to develop scientific skills, it's not surprising that the impact upon these students has been significant:*

*"I think the students gained so much out of it... especially when it comes using to the instruments... They may not get that experience at college and they might not even get that experience at university. We encourage then to be hands on, they get to touch the instrument, they get to work the instrument, they get to set the instrument up... it just benefits them immensely"*

*As well as developing practical skills, the placements have supported the development of workplace skills such as team-working, time-management and communication. There have been benefits for existing staff too, who have enjoyed mentoring students and sharing scientific knowledge. But for Samantha, the benefit of improved practical scientific skills in young people is obviously a prime motivator – and she would recommend hosting T Level science students to other employers:*

*"I would definitely advise it with the potential of employing them, or at least providing the opportunity of an apprenticeship scheme. I truly think that these placements are the best way to get into the industry. Practical work is the best way to get in!"*