



## STEM Insight: Lewis Hutchinson

**Role:** Science Teacher and STEM Coordinator

**School:** University Technical College  
Reading

**Placement:** Syngenta, five days in July 2016

*"The experience is tremendous fun and you gain a wealth of knowledge, and not only that, I've laid the foundations for a successful and really productive partnership between a world-leading scientific organisation and my school as a result. "*

**Host:** Syngenta is one of the world's leading agricultural businesses specialising in crop disease protection seed breeding, biotechnology and plant sciences. The company has operations in 90 countries and employs almost 30,000 employees.

**Motivation:** I wanted to make sure that I am up-to-date with current thinking and practices behind scientific research and development.

I was also really keen to gain experience of what it is like to work within the professional scientific community so that I can tell my students about the stimulating careers on offer.

The attraction of Syngenta was that it is both a world class company and a large local STEM employer. I hoped the placement would enable me to invite scientists from Syngenta to work with our students and inspire students to follow in their footsteps.

**Experience:** Syngenta provided a really well organised and stimulating programme and I thoroughly enjoyed the whole experience. Above all, I very much valued the chance to see how science is conducted in a working environment with a world-class leader in their field of expertise.

It was particularly fascinating to see professional scientists going about their daily work and being able to relate it to content delivered in class. I gained a unique insight into the operation of a large global STEM company along with a significant insight into life as a modern scientist and the skills required to work in this field.



**Impact on me:** During my week I saw a wide range of different scientific disciplines all working in their specialist field but all contributing as a team to the overall scientific aim of furthering knowledge. This opened my eyes to the range of possible career options available and now helps me to enthuse my students about STEM careers by giving them examples of the breadth of possible jobs.

I think one of the most notable changes to my practice is that I now make specific references to the practical skills required to work within the scientific field during my lessons; whether they be problem solving, critical thinking or team work. By doing this my students are better able to understand the value these skills hold and I'm sure that this has helped increase their participation in class.

In fact, colleagues now forward students to me for careers guidance in STEM subjects and means our students are better informed when making the decision between vocational or academic routes at post 16 and beyond.

Above all, it made me aware of my lack of real world industry knowledge and how large businesses perform science. I am now determined to learn more.

**Impact on my college / students:** My STEM Insight experience has already made a significant impact on my school and students. In the classroom it has enabled me to:

- increase the use of industry examples significantly within my teaching, with specific examples of how the scientists I met use scientific ideas, knowledge and principles in their jobs
- regularly use photos and material collected during my placement to put the content of the lesson into an industrial setting, for example the use of lab books and of keeping record of all practical data collected

The broader impact in school is around careers. I have started to build a beneficial partnership with Syngenta and want this to be a lasting connection to develop joint STEM careers ventures such as work experience, work placements, careers talks and visits, and co-teaching. So far:

- employees from Syngenta have delivered careers talks and provided a real life project for students to work on which really motivated them



- a year 11 class and a year 12 class are visiting Syngenta for insight into how they work, explore the range of job roles and experiences of the staff and learn more about the skills required

I hope that the benefits of my placement will soon be spread further as I am setting up a Berkshire wide STEM Co-ordinator teacher meeting with STEM teachers from numerous schools and colleges to inform them of the STEM Insight process, share my experiences and allow them full access to everything I collect in the future.

**Professional development:** Everything was really useful; from the pre-placement checklist which was a great help in planning what I wanted to get out of the experience, to the final CPD session which gave me a wealth of resources and useful websites that I have since shared with colleagues.

