

STEM Ambassador Programme

Case study: STEM Ambassador – Diane Rodger

Overview

Diane Rodger works in Somercotes in Derbyshire and has been a STEM Ambassador since March 2015. In 2019 alone, she supported STEM activities with over 1000 young people.

Charlotte Land, STEM Ambassador Hub Manager for North Midlands, South and East Yorkshire said, "Diane is one of our most inspirational female STEM Ambassadors – capturing young people's imagination and encouraging an interest in STEM as a subject and possible career choice. She shares her passion for STEM in the all the activities she supports and is a great role model particularly to girls considering a career in STEM."

Education/career journey

Diane attended Parkdale Primary School and Carlton-le-Willows Academy in Nottingham. She then spent 10 years raising her children and also undertook a range of short courses eventually giving her enough credits to apply for a university place. Diane got a degree in English Literature and went on to do a Post Graduate Certificate in Education, which led to her teaching maths and IT to adult learners.

Diane is now an Executive Assistant at BASF plc - the largest chemical company in the world. At the Alfreton site where Diane is based, they supply polyurethane systems to transport, construction, oil and gas industries as well as speciality markets.

Diane said, "I'm involved in many aspects of the site from safety to arranging meetings and everything in between. I speak to everyone on site on a regular basis and have to ensure I know who everyone is, what their job entails and be reactive to their needs. I help to ensure the smooth running of the site so that all my colleagues can do their jobs well."

Soon after Diane joined BASF she was asked to arrange an open day - something that the company had never done before. BASF had close links with Nottingham Trent University and Diane was introduced to Heidi Dobbs from Chemnet - the Royal Society of Chemistry's membership community for 14-18 year olds - who helped to pull the event together. Diane said, "I had a great time making the open day happen. Afterwards, Heidi suggested I might want to look into becoming a STEM Ambassador, which I did, and have thoroughly enjoyed ever since!"

Diane continued, "I am very lucky that both my manager and company are fully supportive of me being a STEM Ambassador and helping young people see the options available to them in the field of Chemistry. BASF has a desire to be a role model in the chemical industry for outreach and STEM activity. They recognise the challenge for the industry in ensuring the correct skills are available for a successful future. BASF is committed to investing in future generations of young people with the relevant STEM skills to help enhance the larger chemical industry."

STEM Ambassador activities

One of the main activities that Diane is involved in is ScienceXperience - an innovative project developed at the BASF Alfreton site - which enables local primary school children to visit and have a curriculum led science day at a chemical plant. It is a mixture of practical experiment in a fun environment developed to encourage scientific thinking around the 'why and how'.

Diane said, "ScienceXperience is aimed at pupils at an age when the interest in STEM subjects is the same across genders. The hope is that this will inspire primary age girls as well as boys to keep their interest in STEM subjects. Being involved in its development has been amazing!"

INTERESTING FACT: The group of students doing ScienceXperience are weighed on the weighbridge that the lorry's come in on. Everything that comes into the factory is measured by weight, so BASF decided to measure the ScienceXperience numbers that way too!!!



Diane also attended one of our training sessions looking at the People Like Me resource from WISE – the campaign for gender balance in science, technology and engineering. It provides STEM Ambassadors with an overview of the issue of unconscious bias, how it can lead to girls deciding that STEM is 'not for them' and help to learn how to deliver the training in schools.

Diane said, "The aim of People Like Me is to inspire Year 9 and 10 high achieving young ladies to look at career options in STEM industries by getting a chance to talk to and work with inspiring women from industry. I have introduced and championed - as well as supported - this initiative across the UK BASF sites, offering training and support to colleagues to give them confidence to lead People Like Me sessions in their local schools."

Diane has also supported the following:

- Hosting site tours to local secondary schools.
- Hosting work experience placements for GCSE, A-Level and university students to give them a good overview of most of the jobs on the production site (both the science and administrative roles emphasising neither can exist without the other). In addition, supporting other local businesses to run work experience programs.
- On-site training for local primary schools in conjunction with the Royal Society of Chemistry and Primary Science Quality Mark hub to support training for STEM teachers and showcase ScienceXperience to a wider audience.
- Organising a workshop with the STEM Ambassador Hub to introduce the STEM Ambassadors programme to other local businesses in the area.
- Supporting Big Bang at the Birmingham NEC and making slime with over 1000 young people over 3 days!



When talking about giving advice to young people, Diane said, "TAKE SCIENCE! Seriously, it is not easy to get into this sector if you don't start thinking about science at GCSE. It keeps your options open. If you don't take a science at GCSE then you cannot take it at A-level and you cannot go to university to study a science based subject. Planning starts at 14-years-old!"

Impact

Since its launch in February 2019, ScienceXperience has been seen by almost 200 pupils from six local primary schools.

Diane said, "As part of the ScienceXperience, young people are asked (as pre-work) to draw what they think a scientist looks like. Then after they have completed the session, they are asked, again, to draw what they 'now' think a scientist looks like – this image sums up why I do the work I do with young people!"



Diane said, "The STEM Ambassadors programme is a very rewarding thing to be involved with. It is easy to say that it is great to be able to influence young people in a positive way but personally it enhances my daily work too – it gives my job an extra dimension! I collaborate with colleagues from different areas of the business and different sites around the country as well as inspirational ladies who work in many different local companies."

Diane continued, "Hopefully the young people get a wider understanding of where STEM fits into the working world – there are lots of jobs in Derbyshire in STEM – loads of global companies on their doorstep who need people with STEM qualifications to continue being successful."

Recognition

Charlotte Land, STEM Ambassador Hub Manager for North Midlands, South and East Yorkshire said, "We were recently forwarded information on the Enterprising Women Awards from the East Midlands Chamber. Our team all agreed that Diane would be a fantastic nominee for the Outstanding Contribution to Work in STEM Award."

This award is open to an individual or female-led team who have demonstrated outstanding research and innovation in the field of STEM. Entrants must also demonstrate how they have contributed to raising awareness around STEM careers/research, particularly those practices encouraging more female involvement.

Charlotte Land, continued, "Diane has been shortlisted for the award and we'd like to say a huge congratulations! Diane is a fantastic role model particularly to girls. And she supports lots of activities that help to open girls' eyes up to the links between what they are learning in school and the huge range of opportunities to them in their future."

Diane said, "Becoming a STEM Ambassador has had a big impact on me. I have been on lots of courses, become much more confident in presenting, met loads of interesting people, attended conferences and been nominated for an award!" I'm committed to giving as many local children as possible a love for STEM subjects. I always thought that 'you can't be what you can't see'. Being a role

model, either individually or collectively as a group of professional STEM women is hugely important to what I do.”

Future plans

Diane has signed up to support First Edition – an Engineering Development Trust programme - offering young people active learning experiences in STEM related careers, giving them the opportunity to gain knowledge and exposure that will help them make decisions about their future. Diane will deliver a short presentation to students which outlines, her entry into a STEM career, a brief overview of her role and a short Q&A session for students.

Diane said, “It is important for our company to help develop young people's love of science, especially chemistry, to ensure we have a population leaving university with the skills we need for our company to remain a leading innovator. I aim to give young people aspirations to achieve goals outside of the expected for their demographic; the area we are based in typically has under achievement in science and science related subjects.”

More information

If you’d like to share your own involvement as a STEM Ambassador, please follow our:

- [HUB twitter account](#) and tag us into your posts about your STEM activity using the hashtag #STEMAmbassadors.
- [LinkedIN company page](#) and join our [HUB group](#) – we are setting this up as a way for STEM Ambassadors to talk to each other about their experiences and to share good practice, resources etc.
- [Instagram page](#) and tag us into your photos showcasing your STEM involvement using the hashtag #STEMAmbassadors.

If you’re inspired about Diane’s story and would like to know more about becoming a STEM Ambassador or working with a STEM Ambassador please email ambassadors@debp.org