



STEM Insight: Catrin Williams

Role: STEM Coordinator

School: Grŵp Llandrillo Menai FE College

Placement: Cavendish Nuclear, 5 days
in October 2016

"Even in the short term there are have already been benefits, but I believe that the breath of fresh air approach from the STEM Insight programme will be long lasting on a personal level and have measurable affects in the college."

Host: Cavendish Nuclear is the UK's leading supplier of services to the nuclear industry and is involved in the design, construction, site operations, maintenance and decommissioning of nuclear equipment and sites.

Motivation: I applied for the STEM Insight programme hoping to identify good practice and innovative ways of developing our learners to ensure that they enter the jobs market with

relevant and up-to-date skills. I particularly wanted to find out more about career pathways and the variety of roles available in the nuclear industry so that I could have more confidence when discussing potential careers with learners.

I also hoped that, by establishing a link with an industrial company operating in my local area, it would give me an insight into which skills (curricular and extra-curricular) they look for in apprentices and staff. The College would then be able to promote more specific industrial skills development as part of engineering and other STEM courses.

Experience: Cavendish Nuclear put together a fantastically detailed itinerary for the week that was specifically catered to my needs. This means I now have a much better understanding of the roles available and of different career progression routes.

The most valuable moments of the placement included meeting enthusiastic apprentices at different stages of their training and also meeting women in STEM, including WISE Representatives. This gave me a deeper appreciation of the low number of females in STEM-related careers.



Impact on me: The experience really provoked some new thinking for me as teaching staff are often so focused on the end results that we forget about the individual and their personal journey in developing their own character and skills.

We need to build in activities and experiences into schemes of learning to ensure that our learners leave us with a package of academic and softer, interpersonal skills which better prepare them for the workplace.

In summary, this experience helped me to identify:

- the need for teaching departments to share more specific information about roles available and pathways which may not be 'on the radar' of traditional careers advice services
- the need to increase awareness and promote STEM careers, especially for girls
- the importance of softer skills such as effective communication and improved problem solving skills of learners

- the idea of using our own apprentices as STEM ambassadors and in careers events to discuss real jobs with local school aged learners
- how stronger industry links with education can reinforce safe behaviour for engineering and construction roles, encourage a questioning culture and highlight the human behaviour factors
- gaps in current learning and learner experiences within my organisation

Impact on my college / students: On my return to College I presented the key findings from the programme, including suggestions on how we could implement changes. It is going to take some time for all these changes to have an impact on our students but less than five months since I visited Cavendish I have already managed to:

- update schemes of work with relevant examples from Cavendish Nuclear, arranged for a representative from Cavendish Nuclear to visit our College and meet with students, and arranged for Cavendish Nuclear to provide a real life project for students to work on



- organise a careers information event and arranged for a group of our students to attend a morning workshop followed by a visit to the Cavendish Nuclear site
- share information with colleagues through informal discussions, group presentations, and feedback meetings where a group of six staff members are tasked with relaying this information into their own programme areas
- explore bringing in industry experts for each subject area to complete mock interviews and present on interview techniques
- explore with Cavendish Nuclear the possibility of teachers from my College experiencing a day in industry

Professional development: I found both the supporting toolkit and the CPD meeting very effective as this forced me to think about different aspects of my placement and how I will implement changes in my College.

