

Promoting STEM Careers

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This article charts the outcome of work currently being undertaken at Edge Hill University with students training to become teachers of STEM subjects and staff at PepsiCo's Skelmersdale plant.



The team at Skelmersdale are passionate about what they do, and are keen to foster an appetite for STEM based careers within the next generation of young people, and they are committed to recruiting, training and retaining high quality people who share their passion.

The rationale behind this new concept is that having visited, or taken advantage of an industrial work-based placement at the plant, the students who are training to teach design and technology, science, computer science and mathematics can pass their knowledge and experience directly onto the children they teach, and are also equipped with contact information to facilitate future visits.

This article illustrates how investment to develop practical, hands-on educational activities to promote STEM careers to young people is taking place, and how schools can tap into this to help them to access support for curriculum activity and STEM careers promotion.

A little bit about PepsiCo UK

The PepsiCo site in Skelmersdale, Lancashire, produces a range of high quality product including: Monster Munch, Snack a Jacks, Baked and Walker potatoes crisps. It is a finely tuned production process that sees the conversion of locally sourced potatoes into packaged and pallet ready product within an astonishing 45 minutes! Across the UK PepsiCo employs over 5,000 people, with over 600 being based at the company's Skelmersdale plant, but

the wider workforce extends to include employment opportunities arising from industries relating to the production of packaging, distribution and raw material suppliers.

On site activities

All visits can be tailored to meet individual group needs but a typical visit day always starts with a welcome. At Skelmersdale Julie Holmes, Operations Manager and Richard Buckley, the Site Change Manager, give an overview of the company, and key developments at the Skelmersdale plant, after which students are invited to list all of the roles they thought were undertaken at the plant, a list which always doubles by the end of the day.

The factory floor and 'taste testing'

In addition to an opportunity to integrate a little biology with an exercise in sampling, during a visit to the factory floor, a trip to experience the 'Quality Wall' is not to be missed. This activity provides visitors with the opportunity to experience first-hand the rigorous quality monitoring procedures that are undertaken, which focus on both product and the packaging.

Factory tour checklist

Compliance with strict Health and Safety regulation means visitors are unable to enter the site if they have suffered from sickness 48hrs prior to the visit.



No glass containers can be brought on site, jewellery, watches, false nails and false eyelashes are not allowed, and nail varnish must be removed. Eating is not permitted in any of the production areas, which includes chewing gum.

Legs must be covered whilst on site, so visitors are instructed to wear full length trousers, and whilst you may be allocated boots, wear sensible, flat shoes with socks.

No running is permitted and visitors must read and adhere to the safety signage. Hair nets (and snoods for beards) are provided and must be worn, along with coats, high visibility jackets and ear protection.



Lessons in sustainability

Headed up by Site Sustainability Manager Iain McManus, everyone at the Skelmersdale site takes their environmental responsibilities seriously, and the possibilities for 'real-life' interactive curriculum activity in this area are endless. The plant boasts an impressive record of sending zero waste to landfill, and their on-site water treatment facilities mean the site recycles over 70% of its water usage.

STEM Careers: a case study

Facilitated by Andy Bradbury, one of the shift based Front Line Managers, a key activity undertaken is to meet colleagues who are on hand to talk about their experience and pathway into their current role. PepsiCo is committed to provide training and development opportunities to their own staff, and whilst some colleagues joined the company with qualifications gained in either further or higher education, having joined the company through apprenticeship schemes, others had worked their way up from the factory floor.

'Job dating'

This activity provides students with the opportunity to meet staff from across the company, and to quiz them about their role, specific career trajectories, and to explain how they found their way from school into their current role.

The PepsiCo board game

Staff at the Skelmersdale site have helped to develop a fantastic board game which is designed to be used with students, and addresses a range of STEM jobs within the company.

The concept and prototype STEM board game was developed by PepsiCo apprentices from across the UK. The game incorporates all of the STEM subjects, and aspects of the company's work, and with the aid of a calculator it's a challenge to see if you can beat the record time for completion of 7 minutes 25 seconds, which is held by Altrincham Grammar School for Girls.

