



Case study: Student STEM Ambassadors at Wales High School

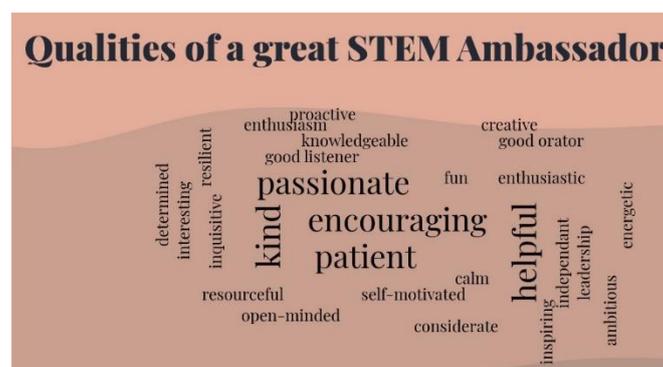
Overview

Wales High School got in touch with the STEM Hub for some support to set up an in-house STEM Ambassador mentoring programme. The programme would be led by Year 12 students to support younger students with STEM including those from local feeder primary schools.

A group of eight students studying/and with an active interest in STEM were identified to take part. They attended two virtual training sessions ran by the STEM Hub including:

Session 1 - Overview of why STEM is important in everyday life, a brief introduction to the STEM Ambassador programme and benefits of getting involved. They also completed two activities including:

- Who's not an Engineer which looked at stereotypes and unconscious bias.
- Word clouds about qualities of a great STEM Ambassador and what makes a good STEM activity.



Session 2 – The opportunity to meet two STEM Ambassadors who talked about their jobs and the types of activities they had supported.

The teacher coordinating the programme at the school created online logbooks for the students to record their volunteering hours. These were based on the details that STEM Ambassadors record on the STEM Ambassador platform following completion of an activity.

Impact

There was lots of impact for the student STEM Ambassadors including:

- Involvement in the planning and delivery of STEM events with teachers and industry professionals.
- Supporting 30 Year 9 students with an 'Innovation Challenge' to develop a fitness app for a regional competition. They helped to plan the sessions with teachers and collated and organised the work produced.
- Supporting the current Year 12 students as academic mentors.
- Developing a workshop with national manufacturing company, Istock Plc, as part of the North Star Science School which they co-delivered at an event in November.



- Developing skills in organisation, teamwork, pedagogical and STEM careers skills. Students have also improved their confidence in developing and sharing their ideas with a range of stakeholders.

All student STEM Ambassadors received a digital badge as part of their role and these were accredited through an online platform so that students could share the badges on LinkedIn, email signatures etc.

Feedback

Students were asked why they wanted to become a student STEM Ambassador and feedback included:

- To encourage more students to take up STEM subjects at a higher level.
- I enjoyed science growing up and would like to create a similar environment for others.
- I saw it as a great opportunity to work with younger people and to broaden my understanding of careers available in medicine.
- To volunteer my time in an area that I am passionate about as well as to make a positive difference to young people's perception of STEM.

Students were asked what they enjoyed most about being a student STEM Ambassador:

- Brainstorming ideas for the North Star event and taking part in the virtual training sessions.
- Seeing all the adult STEM Ambassadors and how far STEM extends into the real world.
- Seeing the ideas that the students we supported came up with.
- Feeling involved in a small team where we were all working together towards the same goal.
- Working with other student STEM Ambassadors and gaining teamwork skills.
- Teamwork and communicating with peers.
- Collaboration with others, it was a new experience.
- Supervising Year 9 students as they designed a fitness app for a competition. This helped me to consider the best ways to work with others over an online medium.

A teacher involved in the Innovation Challenge said, "My STEM Ambassador was a great asset to running the lesson and worked hard to push the students to develop their ideas."

Industry professionals that student STEM Ambassadors worked with said, "Wow, these students are fantastic. They have so much enthusiasm and have developed some fantastic ideas." and "We don't have STEM Ambassadors at our company and these students have made us realise we need some."

Future plans

All the students who took part have expressed an interest in registering as STEM Ambassadors with STEM Learning, and to date five students have officially registered. Moving forward, the school would like all the students who took part to register as STEM Ambassadors and complete their STEM Ambassador induction/training. This would enable them to continue volunteering when they leave Wales High School Sixth Form.

With support from the previous cohort and the local STEM Ambassador Hub, the programme has been re-launched with a new Year 12 cohort. They will be involved in the schools STEM club and a range of competitions and activities taking place over the next academic year. They will also support the school's Enthuse Partnership programme.

More information

DEBP are a Charitable Incorporated Organisation. We work with employers to develop bespoke programmes to support young people. We manage the STEM Ambassador Hub in North Midlands (Derbyshire and Nottinghamshire) and South and East Yorkshire on behalf of STEM Learning. For more information go to www.debp.org and follow us on social media:

- [Twitter STEM Hub account](#)
- [LinkedIN company page](#)
- [Instagram company page](#)

For more information, please email enquiries@debp.org