

Improving science lessons for students transitioning from primary to secondary school

The Malmesbury ENTHUSE Partnership provided the opportunity for primary and secondary schools to work more closely together, facilitating collaboration between science leads, and funding high quality science training to improve teacher knowledge and confidence.

Malmesbury Partnership was led by Malmesbury Secondary School, located in a small market town in Wiltshire. Malmesbury Secondary School is the only secondary school in the area and has a good relation with its feeder primaries.

Focusing on transition aged girls, the partnership also worked with students to raise awareness and aspiration about how STEM subjects were important in their everyday lives and future careers.

What activities did the Partnership take part in?

The partnership engaged in a number of staff training activities, designed to increase staff confidence and expertise in teaching science. Staff attended residential courses at the National STEM Learning Centre in York, training at the local Science Learning Partnership, and an ENTHUSE Placement in industry. This was complemented by internal training delivered by the science lead from the secondary school, working with primary teachers, and their classes.

“The ENTHUSE Partnership funding is vital for turning plans into reality. Malmesbury Secondary has always been keen to work with its feeder schools, but without the partnership, that input would have been confined to taster sessions and a summer STEM club.

Without the partnership there would have been no training for staff. Having well trained confident teachers is the key to raising standards in schools but there is no money for the small schools to release staff or pay training fees.

The partnership also funded the time needed to lead a project like this, including time to plan, time to do and time to evaluate.” - Malmesbury, ENTHUSE Partnership Lead

What was the impact?

On students

- **All seven schools measured an increase in Science attainment.** 30% of girls involved in the Partnership were assessed to be working above their target, compared to 10% at the beginning of the programme.
- **Greater interest in STEM jobs.** Student surveys showed that by the end of the partnership, students felt more positive about STEM jobs and noticed that jobs were discussed more in science lessons.
- **Students were better prepared for secondary science lessons.** Primary school teachers reported that by the end of the partnership, the content of their lessons would better prepare students for transition to secondary school.

On teachers

- **Increase in confidence to link careers to the science curriculum.** Staff training and the opportunity to take part in an ENTHUSE Placement with Highways England increased teacher confidence to teach students about STEM jobs and include career links in lessons.

“Building a strong link with the school wasn’t part of the original plan for our experience hosting a STEM Insight placement, but it came about very organically from having a teacher among us at work, and it was greatly enjoyed and appreciated by everyone involved.” - Garry Packer, Highways England

- **Increase in confidence to run STEM themed extra-curricular activities.** The partnership created a science fair called **‘How Real Stuff Works’**, an event they are planning to continue and grow in the local area.
- **Increased collaboration between rural primary schools.** For staff, being part of the partnership brought together a number of primary science leads who are working in rural village schools, with little opportunity for science collaboration and some with no science specific qualifications.

“The need and desire for collaboration is clear and the evidence all shows value of working together for staff and students alike.” - Malmesbury ENTHUSE Partnership Lead.

Next steps

Following the Enthuse Partnership, the schools would like to extend their work to engage students earlier in their education. The focus on transition continues, with work underway to develop common assessment practises in science lessons across the partnership. There is also growth, with a planned increase to the number of schools in the partnership and the number of teachers taking part.