Culloden Academy

Local Authority: Highland
1000+ pupils

Summary

Culloden Academy is a large secondary school near Inverness, Highland. The development of resources inspired by professional learning has supported all staff in the school’s Biology and Science Departments to work towards using Learning for Sustainability (LfS) approaches with their learners.

Inspiring change

Teacher Katie Hanson, works with S1 and S2 Science and S3-S6 Biology at Culloden Academy. As part of a Masters in Learning for Sustainability at the University of Edinburgh, started in 2015, Katie carried out practitioner inquiries in the development of Learning for Sustainability in the Broad General Education (BGE) Science curriculum. The Masters study gave Katie a broad view of experiential education, environmental philosophy and outdoor learning with a glimpse of how it might be applied directly in the classroom. Her reflections and evaluation of the approaches used was translated into resources that have helped to support wider change throughout Culloden’s Science BGE curriculum.

“This Step-by-Step approach, trialling the activities with classes, working out what works and what does not work before presenting the learning opportunities to the rest of the Department, has all helped in the learning process”.

Katie Hanson, Science Teacher, Culloden Academy
1. Science teacher Katie Hanson was supported to develop her Professional Learning (PL) around Learning for Sustainability (LfS), starting with an MSc in Learning for Sustainability.

2. Resources and PL from the British Council Connecting Classrooms programme and Highland One World Development Education Centre helped develop a real world context for the Science curriculum S1-3.

3. Activities were tested in the classroom - STEM Challenge resources from Practical Action were a particular inspiration.

4. Tried and tested approaches were shared with the rest of the Science Department in professional discussions and with the wider school community using displays and social media.

5. A further partnership with Highland One World as part of the EU funded ‘Start the Change’ programme has resulted in more teachers from Science and other school departments developing Units of Work that address LfS. The S3 BGE Biology course unit on vaccines, for example, now links to the UN Sustainable Development Goals (SDGs), human rights and employability skills.

6. There is more work to be done to make links to the SDGs beyond BGE into the Senior Phase.

"LfS is giving students a real world context for their learning. The themes are linked with literacy, numeracy and communication skills as well as supporting the Department’s focus on increasing employability skills in the curriculum”.

Katie Hanson, Science Teacher, Culloden Academy

How do you know it’s working?

- Students’ attitudinal changes are measured using approaches such as those from the RISC ‘How do we know it’s working’ toolkit
- Pupil engagement has improved.
- Challenging classes have increased enthusiasm and motivation for the subject.

Three tips

1. Take little steps - don’t start thinking you can make a major impact overnight.

2. Use the network of local Development Education Centres across Scotland. The opportunity to network and share ideas through liaison with other practitioners has been invaluable.

3. “Don’t reinvent the wheel”. There are so many excellent resources out there, for example from Practical Action, the World’s Largest Lesson and Signposts for Global Citizenship. Tweak the wheel to make it fit your teaching context.

Thanks to Katie Hanson, Science teacher, Culloden Academy  March 2019