Nature's Work

Gyrfa Cymru Careers Wales

Feedback from a recent Professional Development Teacher Placement event organized by Careers Wales and funded by Science, technology and Engineering Placements (STEPS at Work)

What were your objectives with this placement?

- Get ideas in what can be done as fieldwork activities.
- Knowledge on what type of equipment will be neede to conduct field work.
- How to fill in a risk assessment form for fieldwork activities.
- Safety - Risk Assessments of outdoor pursuits.
- Taking samples - FDGAS
- How to use equipment
- To gain ideas for Science outdoor lessons for around the school grounds and nearby field / scrub land.
- To gain understanding of field trip safety issues and risk assessments.
- Know the types of equipment needed and the types of samples to take.
- To incorporate the 'outdoors' as part of classroom teaching.
- To use / take advantage of the school grounds and local area to encourage enthusiasm and enjoyment in the subject.
- To give myself ideas and courage to carry out activities outside of the classroom.
- To imspire pupils to take note of and acre about nature in their local area and to take responsibility for their actions.

How do the above objectives relate to the school development plan or specifically to your own subject development?

- KS 3 - new curriculum is skills based. Ideas for fieldwork that can be incorporated into schemes of work to enrich the teaching and learning.
- KS 4 - new curriculum as of September 2011 - same principles as stated for KS 3.
- Science KS 3, Biology module (Food relationships) in Year 7 & GCSE with regards to indicators.
- KS 3 New Skills Framework requires Communication Skills, group work and an understanding of the natural world around you.
- The objectives are part of a departmental plan to encourage pupils to be aware of nature on a local basis.
- It is also an objective to take Geography outside of the classroom. We hope to use this as part of the Eco-schools Development Scheme.

In what ways did your experience link with the school development plan?

- KS 3 - new curriculum is skills based. Ideas for fieldwork that can be incorporated into schemes of work to enrich the teaching and learning.
- KS 4 - new curriculum as of September 2011 - same principles as stated for KS 3.
- Science KS 3, Biology module (Food relationships) in Year 7 & GCSE with regards to indicators.
- KS 3 New Skills Framework requires Communictaion Skills, group work and an understanding of the natural world around you.

- The objectives are part of a deoartmental plan to encourage pupils to be aware of nature on a local basis.
- It os also an objective to take Geography outside of the classroom. We hope to use this as part of the Eco-schools Development Scheme.

What were the key learning points and what aspects of the placement were unexpected?

- Resources received from Jim that will be of great use back at school in the department.
- Taking water samples and looking at the biodiveristy within them.
- Variety of sampling techniques in woodland areas e.g. lichens, cover, tar spots on leaves.
- Risk assessments; River sampling
- Woodland sampling.
- How you can use simple equipment to measure densities such as quadrants made from clematis netting.
- The key learning points were to gain confidence in taking pupis outside of the classroom by looking at the use of Risk Assessments, giving simple, creative, innovative, cheap ideas on how our objectives can be achieved.

What surprised you? What new knowledge or understanding have you gained?

- How cheeply fieldwork can be done. There is no need to buy expensive equipment to have fun and enrich the learning process e.g. quadrat out of clematis netting.
- How many different types of lichens.
- Not much equipment needed to measure % coverage, density. Identification of species / classification.
- Holly leaf miner investigation.
- Lots of ideas to use with the classes in our nearby fields, including worksheets, use of sampling techniques which can be used for numeracy. Collection of leaves and simple observations.
- It surprised me how easy it will ne to gain our objectives through the use of local habitats. I have gained a knowledge of local wildlife. Do's and don'ts, and an all-round confidence to take pupils out and into nature.

In what ways has this placement increased your knowledge and understanding of science and technology in the workplace?

- Fieldwork does not have to be a daunting task / process. Fieldwork will engage pupils at another level compared to the classroom - these aspects must be incorporated into our schemes of work and on the classroom floor.
- Improved understanding of risk assessment.
- Lokking at indicator apecies tells you about the cleanliness of the water. Food pyramids - understanding of.
- Fieldwork can be simple and easy to Risk Assess. Plenty of generic risk assessments available.
- Lots of organistaions such as OPAL Surveys with resources available to engage pupils with fieldwork and outdoor learning.
- As a geography teacher and the school's Eco-school representative this has given me an opportunity to consider cross-curricular tasks between many departments.